MANAGING DROUGHT

IN THE SOUTHERN PLAINS

December 8, 2011

Webinar Series Goals

- To improve communication among agencies and organizations in the Southern Plains who are being affected by the historic and exceptional drought
- To provide information on available resources and assistance to help monitor and manage drought
- To understand the impacts of drought in this region *from the perspective of those who are tasked with managing it*
- To document impacts that will help improve the weekly U.S. Drought Monitor assessment and our understanding of how drought impacts evolve and decay

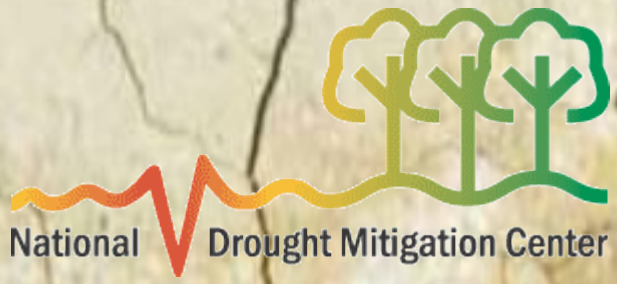
Webinar Format

- 2nd and 4th Thursdays of each month at 11:00 a.m. Central Time
- Overview of regional drought conditions and outlook for next several weeks to months
  - led by the Drought Monitor authors
- Discussion Topic
  - Alternating between an impact type (wildfire, agriculture) and a resource (monitoring tools, assistance programs)
- Comments & Updates from State Climatologists
- Open-ended time for questions and comments
- Total Time Commitment: 30 minutes for presentations, as much time as needed for discussion
- Past webinars, summaries, and Federal/State Assistance links posted on the U.S. Drought Monitor, http://www.drought.gov in the Southern Plains Region. Webinars posted on Youtube: http://www.youtube.com/user/SCIPP01

Regional Drought Monitor Update

Brian Fuchs, Climatologist

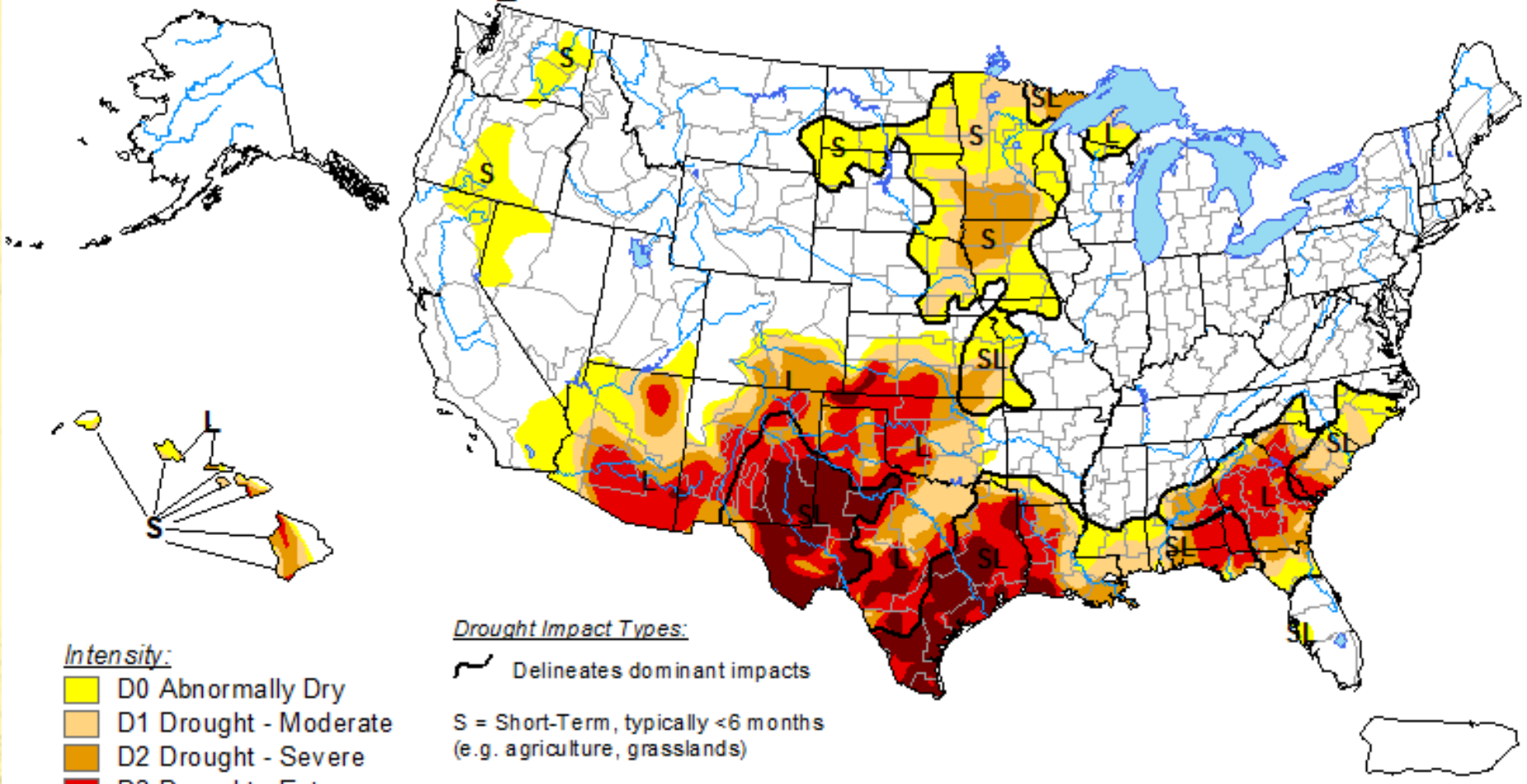
National Drought Mitigation Center
School of Natural Resources
University of Nebraska-Lincoln



SCIPP/NIDIS Drought Webinar Series, December 8, 2011

U.S. Drought Monitor

December 6, 2011
Valid 7 a.m. E ST



Intensity:
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

Delineates dominant impacts

S = Short-Term, typically <6 months (e.g. agriculture, grasslands)

L = Long-Term, typically >6 months (e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://droughtmonitor.unl.edu/

USDA National Drought Mitigation Center

Released Thursday, December 8, 2011

Author: David Miskus, NOAA/NWS/NCEP/CPC

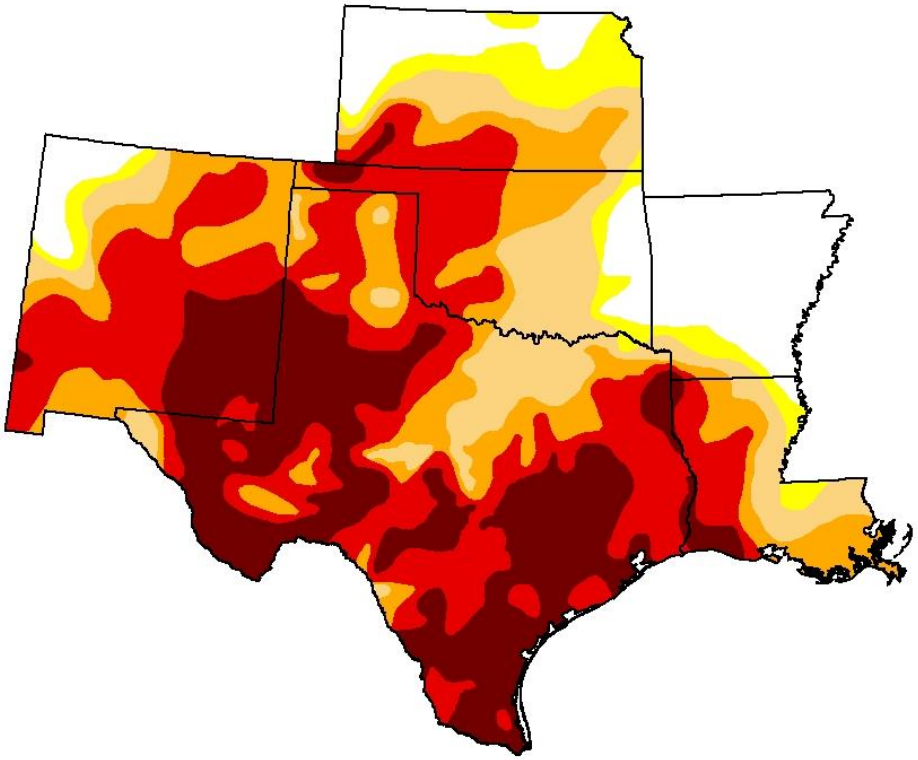
U.S. Drought Monitor

December 6, 2011
Valid 7 a.m. EST

South Central United States

Drought Conditions (Percent Area)

	D0	D0 - D4	D1 - D4	D2 - D4	D3 - D4	D4
Current	13.61	86.39	80.65	67.49	50.74	22.48
Last Week (11/29/2011)	9.87	90.13	85.46	71.58	56.25	28.04
3 Months Ago (09/06/2011)	7.17	92.83	89.09	81.24	70.20	52.18
1 Year Ago (11/30/2010)	39.45	60.55	38.36	13.37	1.99	0.00



Intensity:

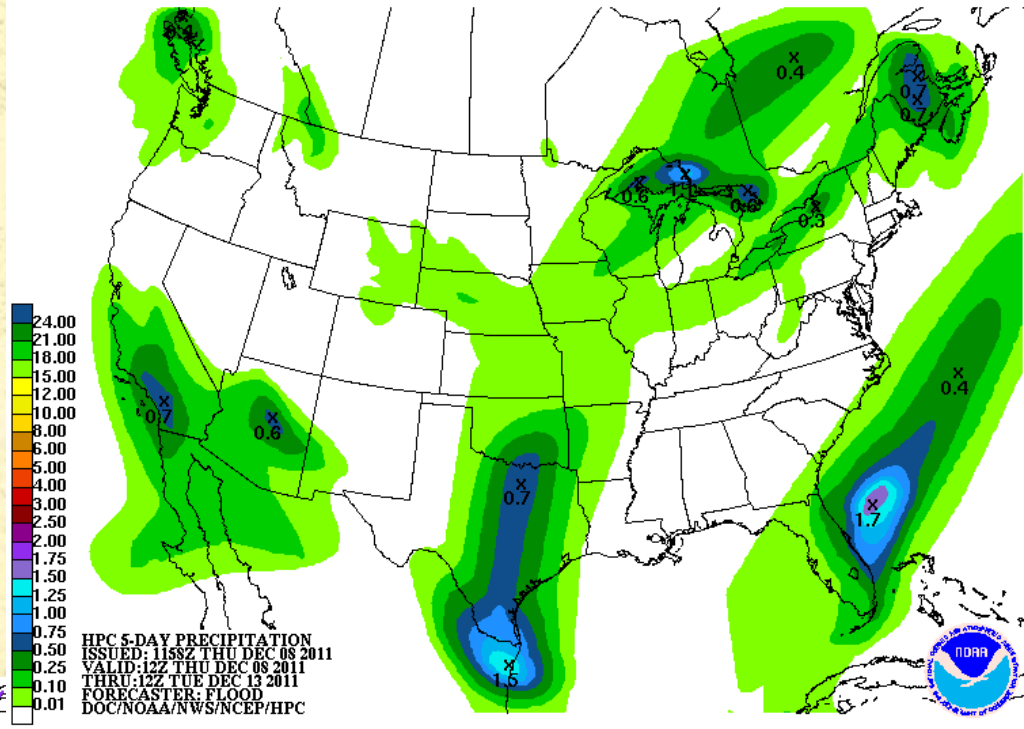
- D0 - Abnormally Dry
- D1 - Drought Moderate
- D2 - Drought Severe
- D3 - Drought Extreme
- D4 - Drought Exceptional

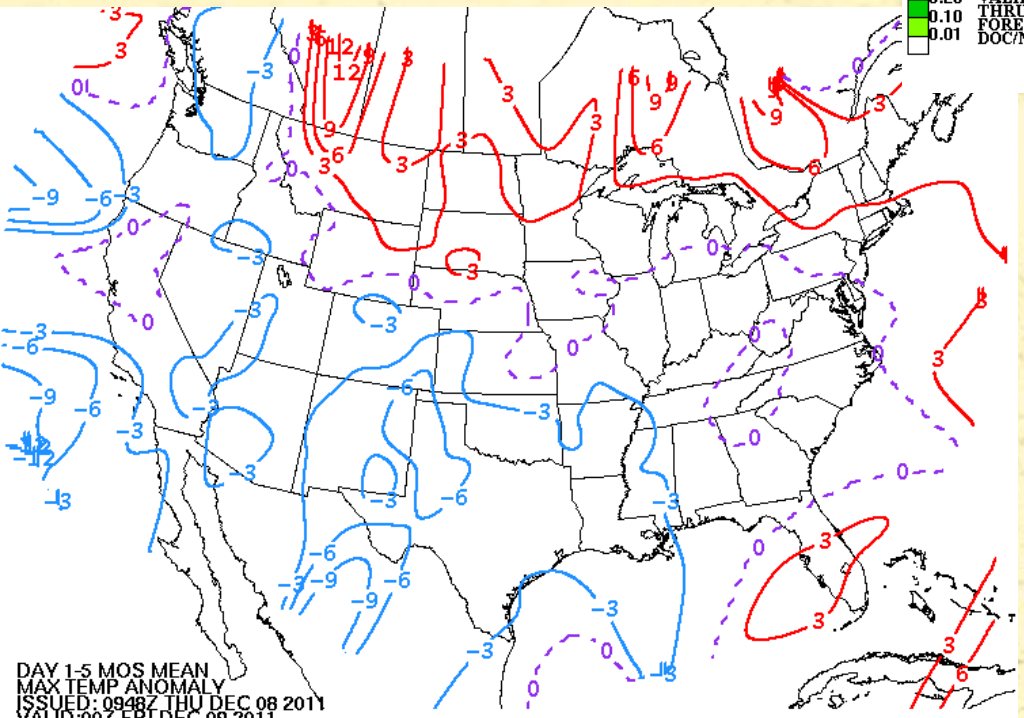
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forcast statements.

http://droughtmonitor.unl.edu

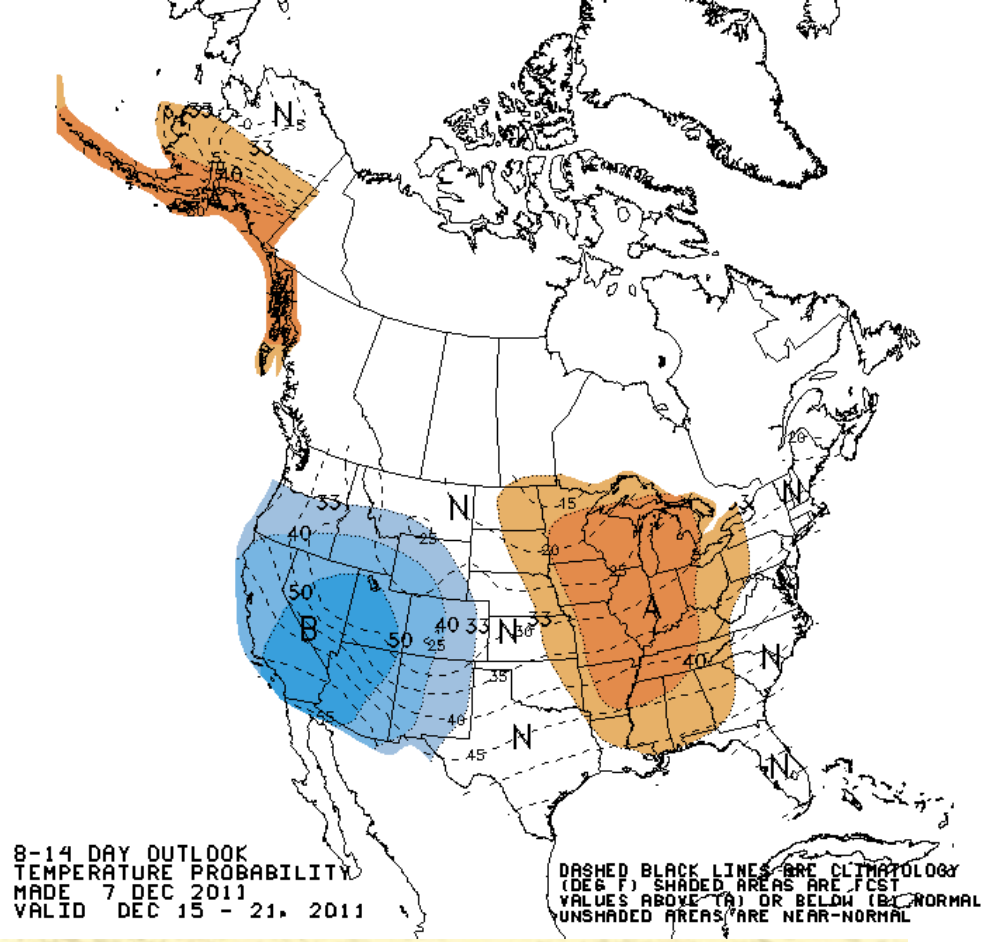
Released Thursday, December 8, 2011
David Miskus, NOAA/NWS/NCEP/Climate Prediction Center

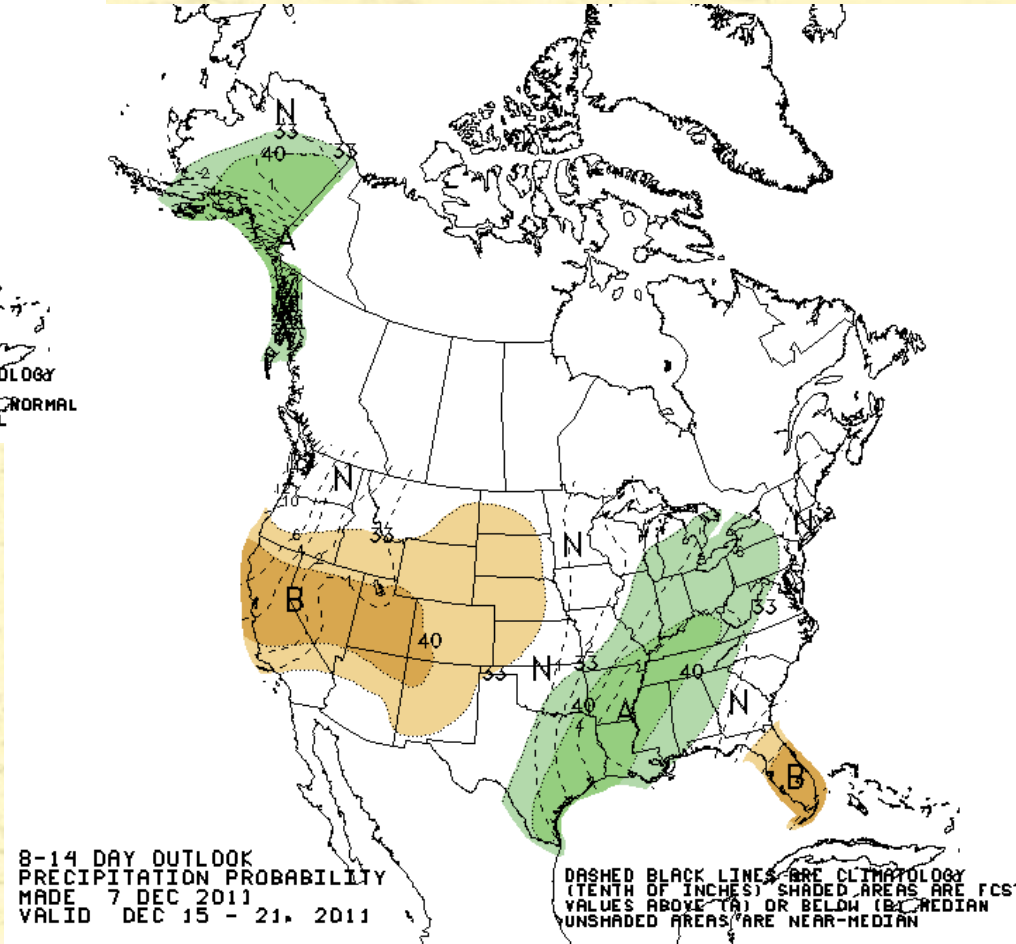
HPC 5-Day Outlook



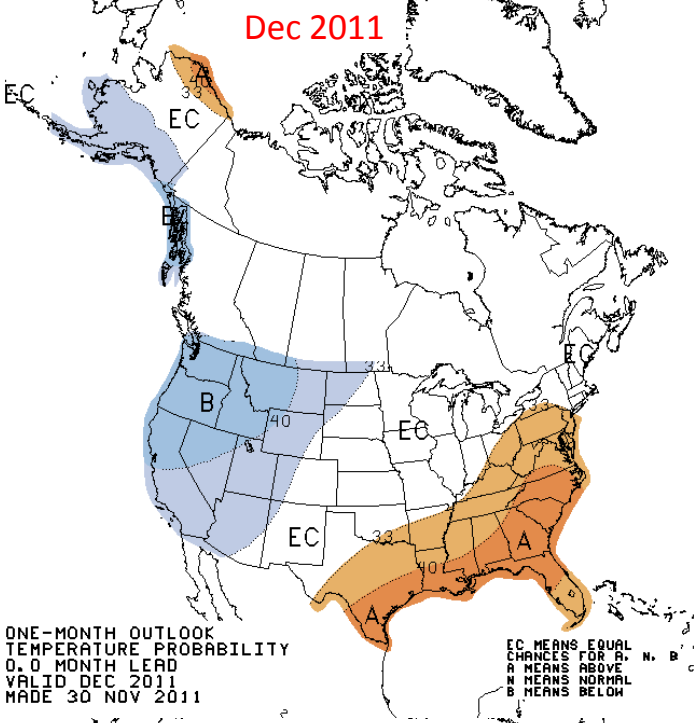


CPC 8-14-Day Outlooks

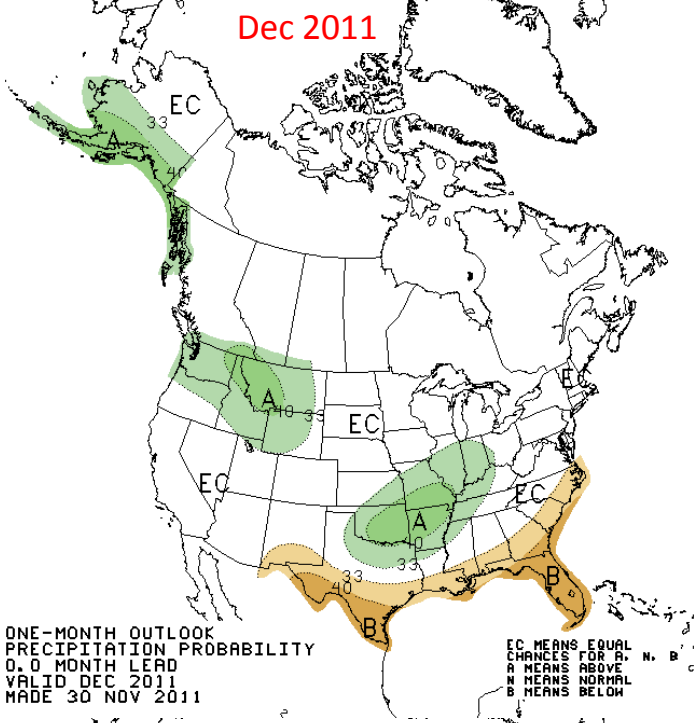




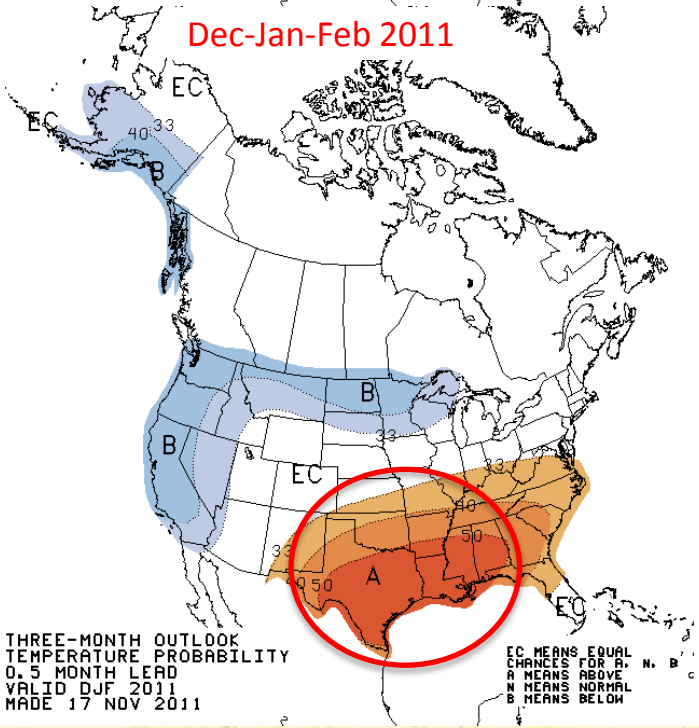
Dec 2011



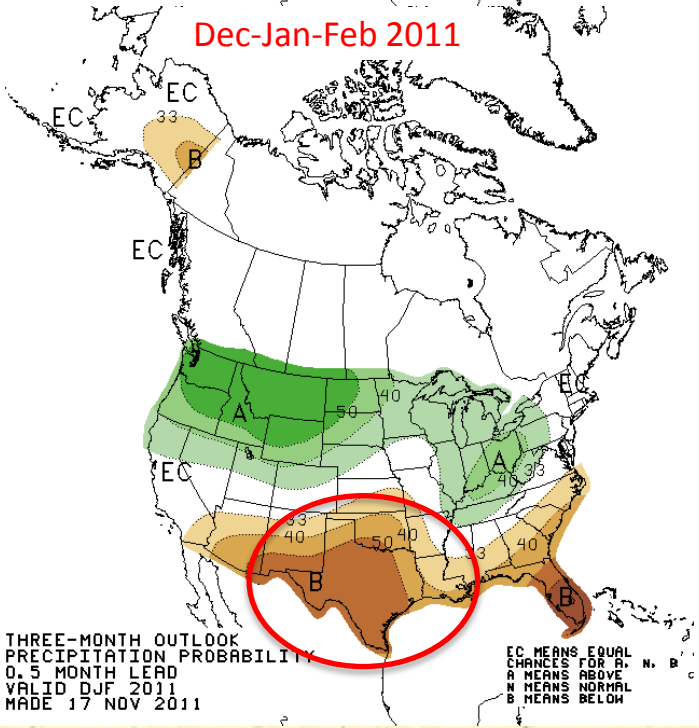
Dec 2011



Dec-Jan-Feb 2011



Dec-Jan-Feb 2011

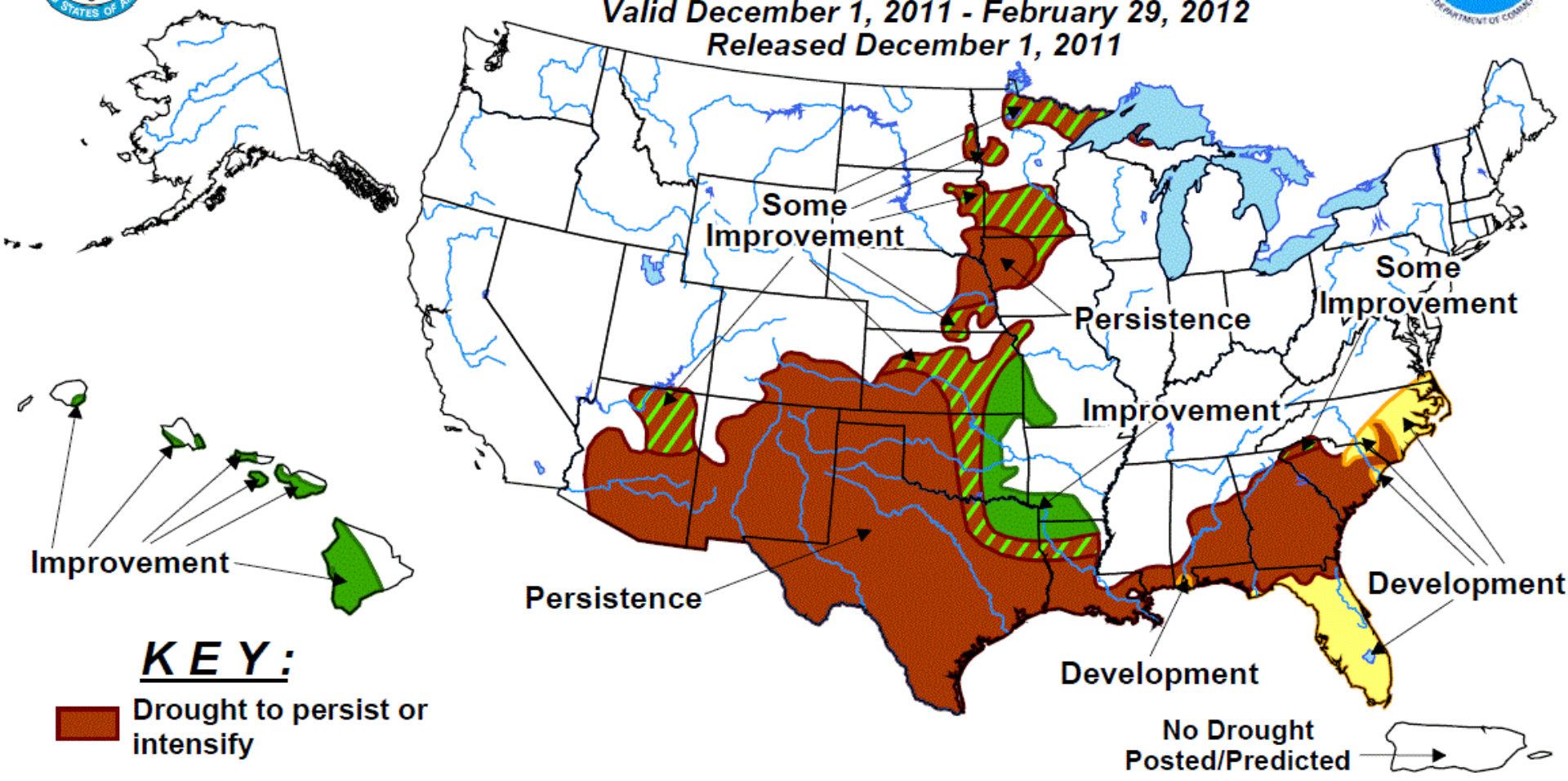


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid December 1, 2011 - February 29, 2012

Released December 1, 2011



KEY:

- **Drought to persist or intensify**
- **Drought ongoing, some improvement**
- **Drought likely to improve, impacts ease**
- **Drought development likely**

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

Featured USDM Product

Did you know…..

The National Drought Mitigation Center has worked with rangeland experts to assist ranchers in developing ranch plans for their operations during drought?

www.drought.unl.edu/ranchplan.Overview.aspx

Drought is a normal part of climate...it will happen again. Fortunately, there are things you can do before, during, and after drought to reduce your risk. Ranchers are increasingly implementing new ways to better prepare for and respond to drought.

The information, strategies and resources on this site are designed to provide livestock producers in the Great Plains region with information on how to incorporate management strategies to reduce the threat drought poses to livestock and forage operations.

Managing Drought Risk on the Ranch: Great Plains Examples

drought.unl.edu/ranchplan/Overview.aspx

South Dakota

Daybreak Ranch
(Central)

Nebraska

Tippets-Myers Ranch
(Western Sandhills)
Reed Hamilton Ranch
(Sandhills)
Shamrock Ranch
(Southwestern)

Kansas

Alexander Ranch
(South Central)
Adams Ranch
(North Central)

Colorado

Welch Ranch
(Southern)

Texas

Johnson Ranch
(West Central)

Where to Start

- Start here if you are in a drought
- Start here if you are recovering from a drought
- Start here if you are preparing for a drought
- Write a Drought Plan
- How to use this site

Drought Conditions

- U.S. Drought Monitor
- Water Year Precipitation (Oct. 1st to present)
- Precipitation - past 30 days
- Weather forecast
- Long Term Outlook

Tools and Resources

- Inventory and Monitoring Tools
- Grazing Management Tools
- Financial Tools
- Drought Planning Tools
- Planning and Drought Resources by State

www.drought.unl.edu/ranchplan/Overview.aspx

Funding Provided by the United States Department of Agriculture Risk Management Agency

RMA

Drought Basics

The objective of this section is to describe how drought impacts your ranching operation.

If you'd like to gain a better understanding of how drought affects your area, how drought affects grasses, livestock, and grazing management, how drought impacts cattle market cycles, or how planning for drought can make a difference in your bottom line, this is the place to start.

Grasses & Drought

- How Does Drought Impact Grasses?
- Why is Soil Moisture Important to Plant Growth?
- Will Limited Plant Growth This Year Hurt Next Year's Growth?
- What's a Rapid Growth Window?

Grazing & Drought

- How Do Grazing & Drought Interact?
- Do Diverse Pastures Hold Up Better During Drought?
- How Do Last Year's Grazing Practices Affect My Grass This Year?
- Can My Grazing Practices Influence How Much Moisture is in the Soil?

Financial Considerations

- What are the Financial Considerations in Planning for Drought?

Planning

- How Am I Affected by Drought?
- How do I know when I am In Drought?
- How Does Forage Growth Vary within the Great Plains Region?

Weather & Drought

- What is Drought?
- What is "Normal Precipitation?"
- What's the Difference between a Short-term and Long-term Forecast?
- How Do We Measure Drought?
- How Do We Monitor and Forecast Drought?

Livestock & Drought

- How Does Drought Affect Livestock Nutrition and Gain?

Write a Drought Plan

Many range publications recommend that managers develop drought plans. The planning steps provided here have been developed by ranchers throughout the Great Plains, as well as forage, range, and agricultural economics specialists. These steps will help range managers develop a solid plan of action for situations (such as drought) that lead to forage shortages.

Drought Planning Steps

Step 1: **Form Planning Team**

Step 2: **Set Ranch Vision and Strategic Objectives**

Step 3: **Take Inventory**

Step 4: **Identify Critical Dates and Target Conditions**

Step 5: **Learn to Monitor Resources**

Step 6: **Develop Strategies for Preparing for Drought, Responding to Drought, and Recovering from Drought**

Step 7: **Implement and Evaluate the Plan**

Sample Drought Plans

Colorado

Southern Colorado Case Study - Welch Ranch

Kansas

South-Central Kansas - Alexander Ranch

North-Central Kansas - Adams Ranch

Nebraska

Southwest Nebraska - Shamrock Ranch

Western Nebraska Sandhills - Tippets-Myers Ranch

Nebraska Sandhills - Reed Hamilton Ranch

South Dakota

Central South Dakota - Daybreak Ranch

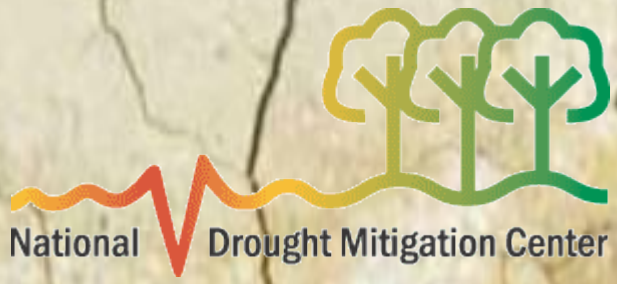
Texas

West-Central Texas - Johnson Ranch

Submit a Drought Plan Example

Contact Information:

Brian Fuchs
bfuchs2@unl.edu
402-472-6775
National Drought Mitigation Center
School of Natural Resources
University of Nebraska-Lincoln



Rainfall Index Vegetation Index Pasture, Rangeland, Forage (PRF) Crop Insurance Program

Managing Drought - Cattle & Livestock Webinar

USDA, Risk Management Agency
Amy Roeder

Crop Insurance Goal - PRF

- Rancher's need an insurance program for their grazing and haying perils
- RMA is committed to meeting those needs
- Limited options
- Pros and Cons to both programs (RI/VI)
- Do producers prefer RI?

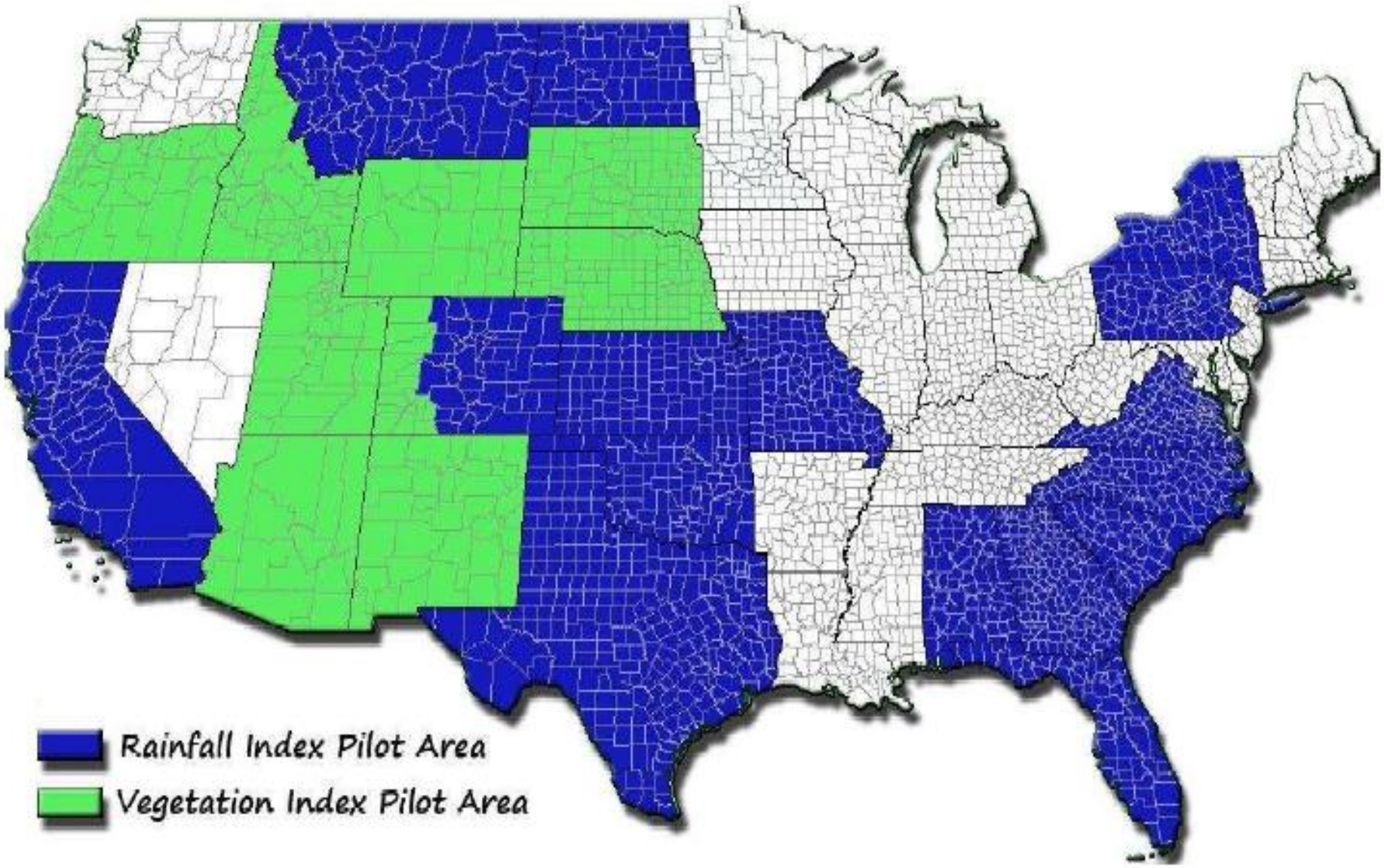
THIS IS NOT DROUGHT INSURANCE (Multi Peril)

- RMA does not use the term drought for the Vegetation Index program nor for the Rainfall Index program

Challenges – PRF

- Pasture, Rangeland, Forage Crop
  1. Various plant species
  2. Timing of plant growth
  3. Lack of individual/industry data
  4. Vast range of management practices across the industry
  5. Publicly announced prices not available
  6. Crop continuously harvested via livestock

Pasture, Rangeland Forage - 2011 Crop Year County Availability by Insurance Plan



Program Overview

Area Plan of insurance

- Not individual coverage
- Losses are area based, not producer based
- No loss adjustments, records, etc.
- More timely payments
- Does not reward poor management practices

Program Overview

- Index Intervals
  - Minimizes dependency on subjective pre-determined biomass growing seasons
    - Elevation, climate, etc. found within an area
  - Maintains consistency across the country
    - Allows for regional and local variance
    - Allows individual freedom to select appropriate intervals

Program Overview - VI

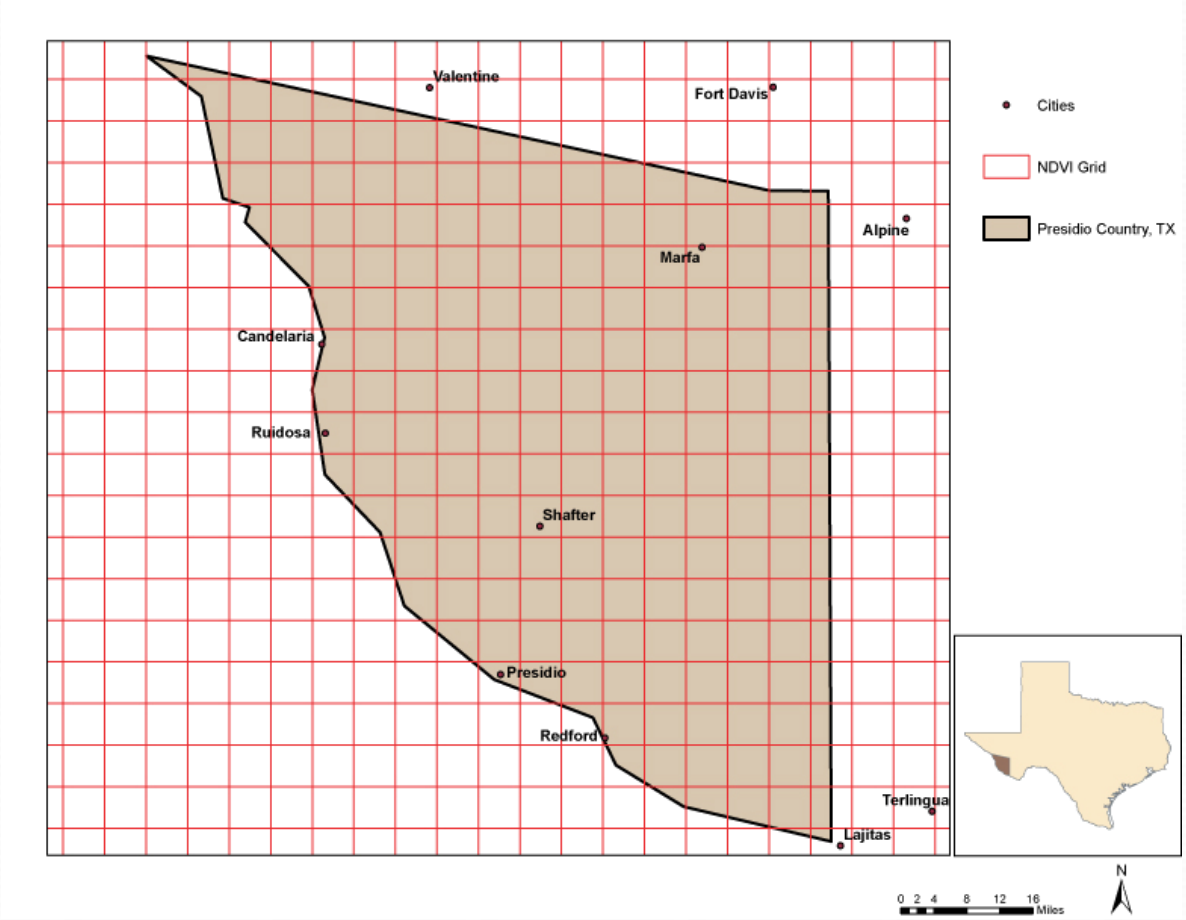
- Vegetation Index Program
  - Area Based Plan
    - Approximately 8 x 8 km grid vs. county
  - Utilizes satellite remote sensing data
    - Normalized Difference Vegetation Index (NDVI)
  - Deviation from Normal: 1989 to 2009, captures multiple perils
  - Review of historical indices and how they relate to your ranch is critical
  - Critical that peak of growing season is insured and not time periods outside those months

Program Overview - VI

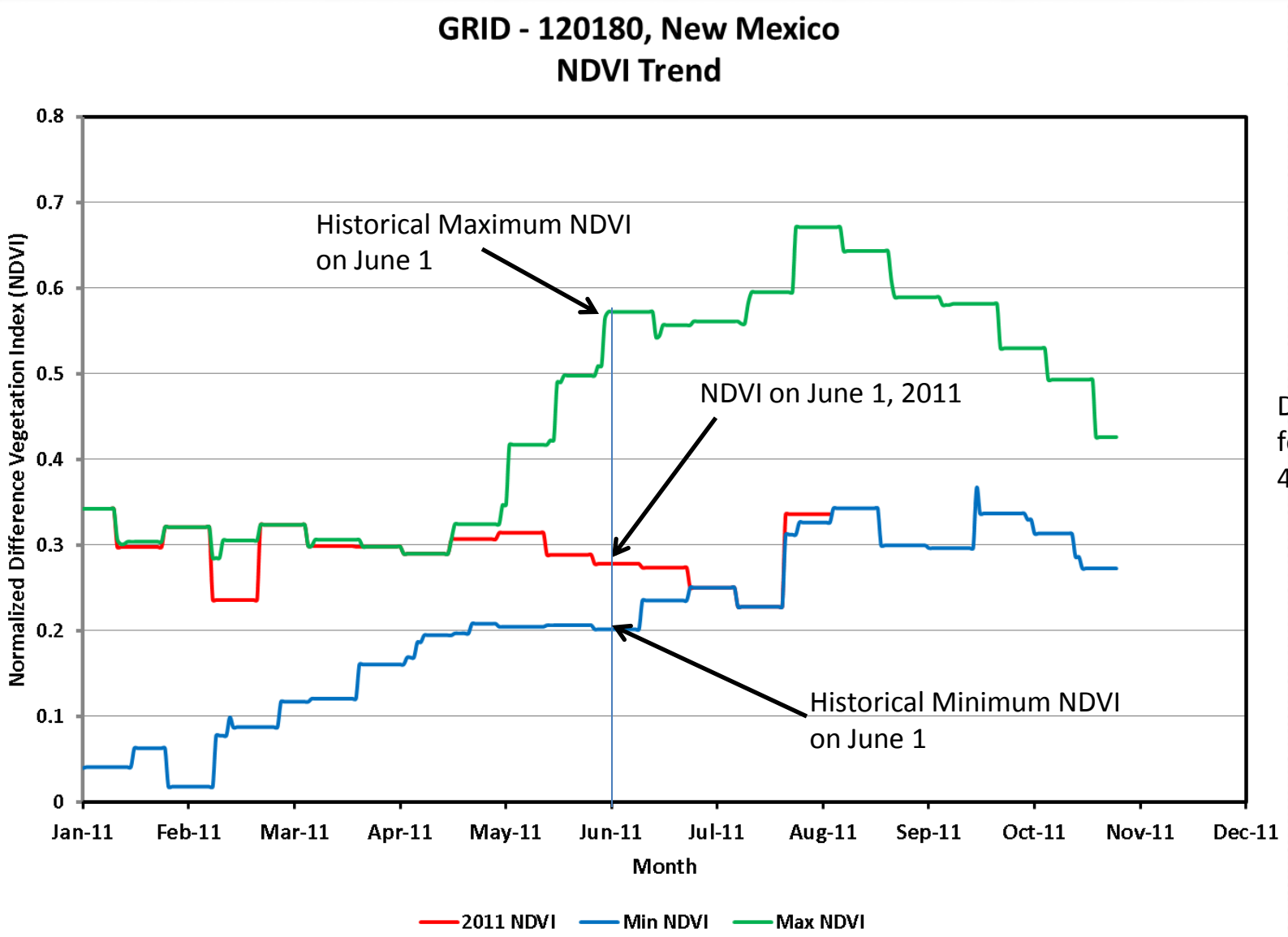
- Crop Year divided into 10, 3-month index intervals
  - Must select at least 1 interval
  - Currently can select more than 1 interval
    - Some areas fewer intervals are available
- Ability for producers to manage appropriate timing risks
- The 3-month intervals provide for greater reaction to biomass reduction events vs. a yearly average

Grid Overview – VI

- Area of insurance = 8 x 8 km (~ 4.9 x 4.9 miles)



Daily Index Calculation



Daily Index for June 1= 49.7

Program Overview - RI

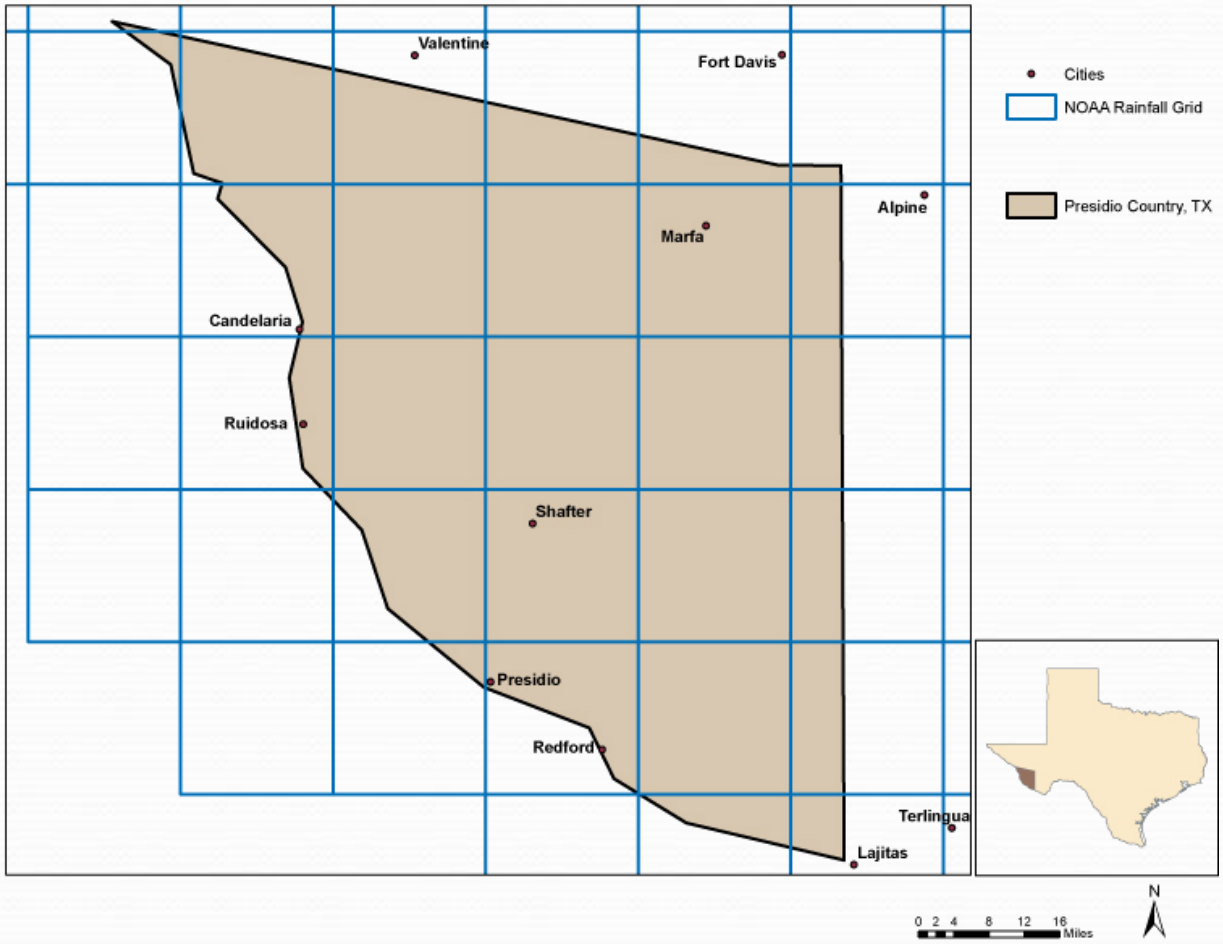
- Rainfall Index Program
  - Area Based Plan
    - 0.25 degree grid vs. county
  - Utilizes NOAA daily reported weather data
    - NOAA: Climate Prediction Center (CPC)
  - Deviation from Normal: 1948 to 2009
  - Review of historical indices and how they relate to your ranch is critical
  - Critical that critical precipitation periods are insured and not time periods outside those months

Program Overview - RI

- Crop Year divided into 11, 2-month index intervals
  - Must select at least two intervals
  - Currently can select up to 6 intervals
- Ability for producers to manage appropriate timing risks
- The 2-month intervals provide for greater reaction to biomass reduction events vs. a yearly average
- California – fewer than 11 Intervals are available

Grid Overview - RI

- Area of insurance = 0.25^{o} grids



What we hear - RI

- Rancher's believe RMA is using a single point specific weather station
- Rancher's provide NWS, NCDC, WFO, or other NOAA/USGS/NASA data sets, airport weather reports, etc.
- Rancher's use their own rain gauges
- Rancher's believe grid results will always reflect exact conditions on their ranch
- Purpose: to provide general rainfall conditions in a grid, not measure a single gauge

Where we are today?

- VI -Ten Index Intervals/year (3 month intervals)
  - Not all intervals offered in all states – less than 10
  - ONLY 7 intervals have been released to date
    - Latest interval released to date: July, August, September
- RI – Eleven Index Intervals/year (2 month intervals)
  - All offered in all states – exception California
  - ONLY 8 intervals have been released to date
    - Latest interval released to date: August/September
- Drought conditions in New Mexico, Texas, Oklahoma, etc. with catastrophic impacts
  - Impacts to the industry as a whole

2011 VI PRF Est. Losses To Date

State	Net Acres Insured	Liability	Premium	Indemnity	Percent of Total Acres	Loss Ratio
AZ	28,423	$129,894	$17,523	$32,798	0.80%	1.87
CO	97,000	$847,780	$92,616	$92,491	2.74%	1.00
ID	4,654	$57,302	$5,328	$0	0.13%	0.00
NE	329,853	$7,366,583	$747,948	$6,815	9.31%	0.01
NM	1,317,981	$9,953,521	$1,736,301	$3,703,034	37.21%	2.13
OR	15,793	$241,275	$36,113	$12,751	0.45%	0.35
SD	657,567	$10,415,021	$1,362,337	$25,037	18.56%	0.02
WY	1,091,129	$7,345,212	$1,306,612	$257,699	30.80%	0.20
Total	3,542,400	$36,356,588	$5,304,778	$4,130,625		0.78

2011 RI PRF Est. Losses To Date

State	Net Acres Insured	Liability	Premium	Indemnity	Percent of Total Acres	Loss Ratio
AL	61,480	$6,625,620	$811,640	$796,557	0.20%	0.98
CA	184,674	$20,745,858	$9,767,183	$5,636,748	0.60%	0.58
CO	1,288,485	$21,700,009	$4,150,827	$3,881,798	4.18%	0.94
FL	691,391	$26,859,769	$5,365,077	$3,307,596	2.24%	0.62
GA	22,382	$2,206,107	$315,353	$510,867	0.07%	1.62
KS	170,192	$5,517,928	$890,924	$714,118	0.55%	0.80
MO	51,603	$3,899,893	$536,639	$295,738	0.17%	0.55
MT	3,708,911	$26,873,597	$4,420,899	$1,034,856	12.03%	0.23
NC	29,726	$1,771,962	$191,561	$108,042	0.10%	0.56
ND	2,218,802	$45,165,704	$7,378,768	$299,129	7.20%	0.04
NY	5,005	$937,915	$74,842	$27,581	0.02%	0.37
OK	265,892	$5,089,111	$903,032	$1,966,473	0.86%	2.18
PA	40,470	$11,834,824	$1,240,289	$323,458	0.13%	0.26
SC	5,958	$863,540	$104,616	$81,407	0.02%	0.78
TX	22,024,389	$292,238,897	$67,609,955	$132,209,971	71.46%	1.96
VA	51,003	$4,013,051	$420,397	$232,395	0.17%	0.55
Total	30,820,361	$476,343,785	$104,182,002	$151,426,734		1.45

2011 New Mexico Est. Results (VI)

Interval	Net Acres Insured	Liability	Premium	Indemnity	Percent Acreage by Interval	Loss Ratio
Jan/Mar	174,070	1,464,411	184,800	0	13.21%	0
Feb/Apr	37,724	262,097	41,331	0	2.86%	0
Mar/May	38,930	295,009	44,328	2,007	2.95%	0.05
Apr/June	392,795	2,789,981	609,667	375,004	29.80%	0.62
May/July	75,476	496,163	83,320	341,737	5.73%	4.1
June/Aug	120,039	876,627	127,427	766,847	9.11%	6.02
July/Sept	301,254	2,387,609	421,628	2,217,439	22.86%	5.26
Aug/Oct	55,837	385,600	70,100		4.24%	
Sept/Nov	11,976	100,949	15,541		0.91%	
Oct/Dec	109,880	895,075	138,159		8.34%	
Total	1,317,981	9,953,521	1,736,301	3,703,034	100.00%	2.13

2011 – Texas Est. Results (RI)

Interval	Net Acres Insured	Liability	Premium	Indemnity	Percent Acreage by Interval	Loss Ratio
Jan/Feb	3,549,348	47,164,423	12,292,185	19,191,401	16.12%	1.56
Feb/Mar	427,950	5,114,178	1,318,285	3,982,057	1.94%	3.02
Mar/April	3,289,545	42,922,104	10,772,323	37,390,318	14.94%	3.47
April/May	676,638	10,838,775	2,017,691	7,673,827	3.07%	3.8
May/June	3,235,646	43,175,383	7,561,207	28,527,914	14.69%	3.77
June/July	525,868	7,030,586	1,396,687	4,810,668	2.39%	3.44
July/Aug	2,935,938	39,486,321	8,647,773	25,508,805	13.33%	2.95
Aug/Sept	554,671	8,072,485	1,647,481	5,124,981	2.52%	3.11
Sept/Oct	2,986,753	39,411,774	7,876,687		13.56%	
Oct/Nov	448,341	6,204,519	1,480,010		2.04%	
Nov/Dec	3,393,692	42,818,349	12,599,626		15.41%	
Total	22,024,389	292,238,897	67,609,955	132,209,971	100.00%	1.96

2011 – Oklahoma Est. Results (RI)

Interval	Net Acres Insured	Liability	Premium	Indemnity	Percent Acreage by Interval	Loss Ratio
Jan/Feb	25,431	595,585	128,851	233,693	9.56%	1.81
Feb/Mar	6,623	98,709	16,107	55,499	2.49%	3.45
Mar/April	39,546	806,703	147,712	476,589	14.87%	3.23
April/May	29,268	342,722	51,881	184,655	11.01%	3.56
May/June	40,573	841,487	112,104	368,526	15.26%	3.29
June/July	25,985	314,969	45,115	219,201	9.77%	4.86
July/Aug	30,856	707,659	127,153	390,358	11.60%	3.07
Aug/Sept	13,736	148,270	25,785	37,952	5.17%	1.47
Sept/Oct	22,264	555,136	99,941		8.37%	
Oct/Nov	6,719	89,815	18,665		2.53%	
Nov/Dec	24,891	588,056	129,718		9.36%	
Total	265,892	5,089,111	903,032	1,966,473	100.00%	2.18

2011 – Kansas Est. Results (RI)

Interval	Net Acres Insured	Liability	Premium	Indemnity	Percent Acreage by Interval	Loss Ratio
Jan/Feb	12,918	753,210	170,607	31,570	7.59%	0.19
Feb/Mar	2,535	73,817	18,532	25,423	1.49%	1.37
Mar/April	24,814	686,114	100,987	113,089	14.58%	1.12
April/May	5,100	238,959	26,239	73,330	3.00%	2.79
May/June	29,463	787,313	90,692	89,548	17.31%	0.99
June/July	16,471	475,248	56,846	162,079	9.68%	2.85
July/Aug	34,243	787,635	118,339	152,829	20.12%	1.29
Aug/Sept	17,825	500,521	70,362	66,250	10.47%	0.94
Sept/Oct	12,048	380,899	69,459		7.08%	
Oct/Nov	4,387	429,701	72,058		2.58%	
Nov/Dec	10,389	404,511	96,803		6.10%	
Total	170,192	5,517,928	890,924	714,118	100.00%	0.8

Web Based Tools

www.rma.usda.gov

Crop Policies and Pilots

Rainfall and Vegetation Indices

The Rainfall and Vegetation Index plans of insurance are designed as risk management tools to insure against declines in an index in a designated area called a grid. They are primarily intended for use by producers whose crop production tends to follow the average precipitation or vegetation patterns for the grid. It is possible for you to have low crop production on the acreage that you insure and still not receive a payment under these plans. Because the program is designed for producers whose crop production tends to follow average patterns and not individual crop production, you should review the historical indices, additional tools, and information provided to determine if these programs are suitable for your risk management needs.

Rainfall Index (RI) - is based on weather data collected and maintained by NOAA's Climate Prediction Center. The index reflects how much precipitation is received relative to the long-term average for a specified area and timeframe.

- RI Basic Provisions (PDF)
- RI Pilot Fact Sheet (PDF)
- Crops covered:
  - Apiculture
  - Pasture, Rangeland, Forage (PRF)

Vegetation Index (VI) - is based on the U.S. Geological Survey's Earth Resources Observation and Science (EROS) normalized difference vegetation index (NDVI) data derived from satellites observing long-term changes in greenness of vegetation of the earth since 1989.

- VI Basic Provisions (PDF)
- VI Pilot Fact Sheet (PDF)
- Crops covered:
  - Apiculture
  - Pasture, Rangeland, Forage (PRF)

For more information regarding these programs, please contact a qualified crop insurance agent.

For more information regarding the contents of this page, please contact: RMA.KCVIRI@rma.usda.gov.

Last Modified: 06/25/2010

Grid Locator
Pasture, Rangeland, Forage

Find a Location: Search

Enter name, address, or latitude/longitude values. More Info

Vegetation | Rainfall

Grids: Counties: Marker Info: Google Maps Print
Labels: Labels:

Current Location

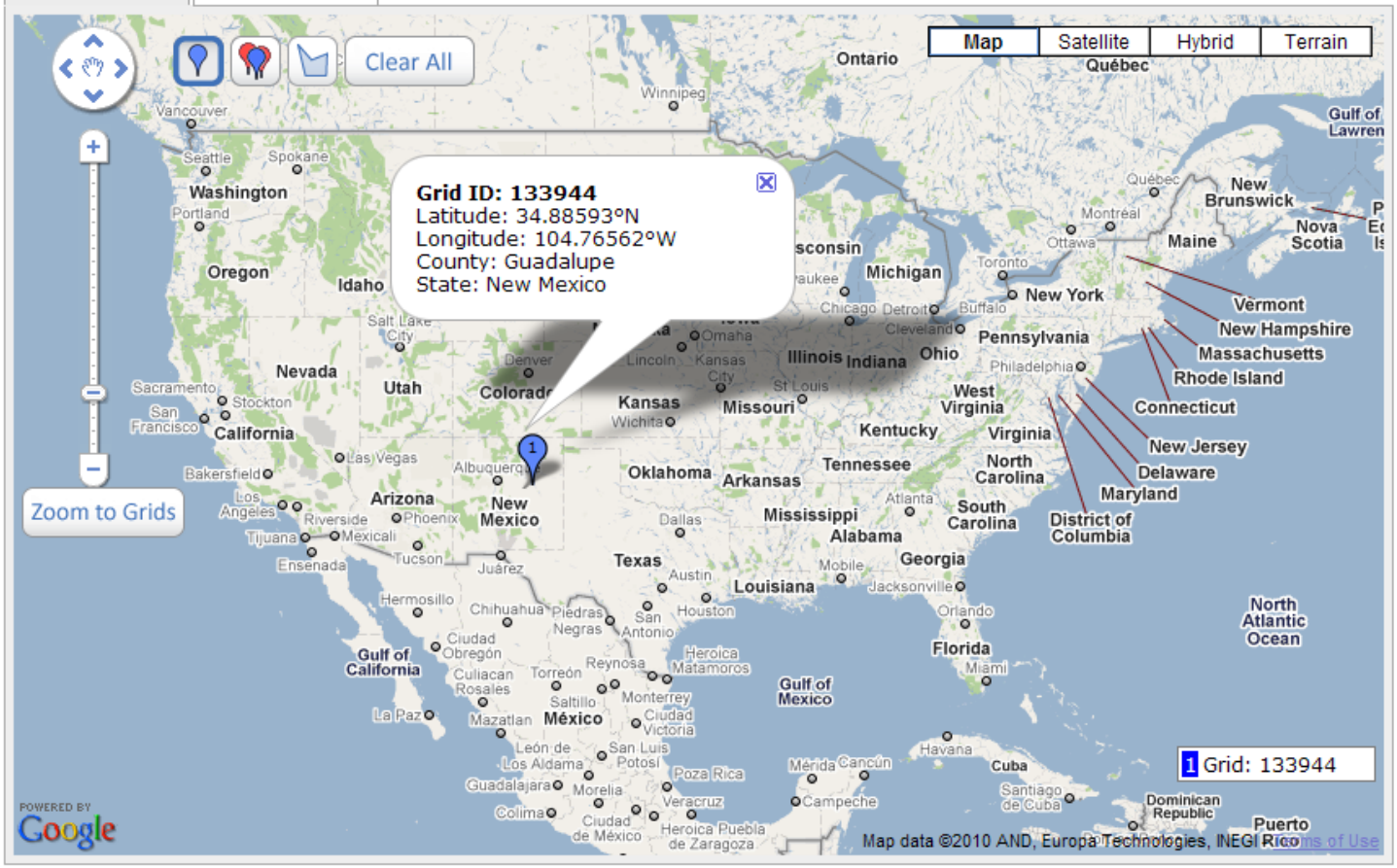
Grid ID: **133944**
Latitude: 34.88593°N
Longitude: 104.76562°W
County: Guadalupe
State: New Mexico
Address: Santa Rosa, NM, USA

Grid Tools:

- Decision Support Tool
- Historical Vegetation Indices
- View Actuarial Info
- View Cost Estimator

Steps

1. Enter nearest town or address
2. Click Search
3. Navigate to property
4. Click a point on property
5. Print view for records
6. Note the Grid ID
7. Choose grid tool to view data



This website is a product of AgForce, GMS, and RMA.

Grid Locator
Pasture, Rangeland, Forage

Find a Location: Search

Enter name, address, or latitude/longitude values. More Info

Vegetation | Rainfall

Grids: Counties: Marker Info: Google Maps Print
Labels: Labels:

Current Location

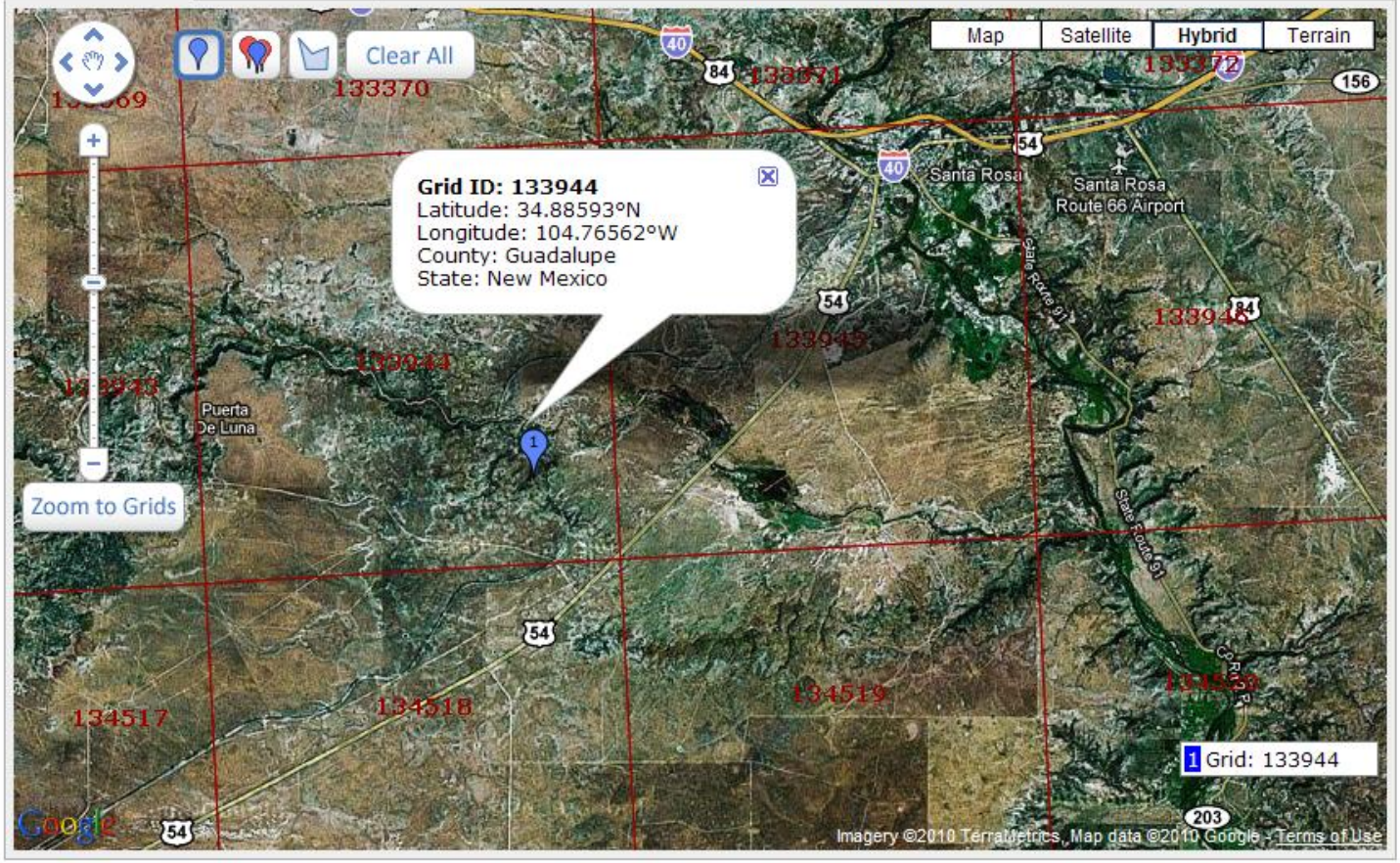
Grid ID: 133944
Latitude: 34.88593°N
Longitude: 104.76562°W
County: Guadalupe
State: New Mexico
Address: Santa Rosa, NM, USA

Grid Tools:

- Decision Support Tool
- Historical Vegetation Indices
- View Actuarial Info
- View Cost Estimator

Steps

1. Enter nearest town or address
2. Click Search
3. Navigate to property
4. Click a point on property
5. Print view for records
6. Note the Grid ID
7. Choose grid tool to view data



This website is a product of AgForce, GMS, and RMA.

Decision Support Tool

Pasture, Rangeland, Forage

This tool is for illustration purposes only. Your actual information may differ
For additional information, please click here.

Rainfall | Vegetation

Please Select a Location: State: New Mexico County: Guadalupe Grid: 133944 Grid Locator Print

Protection Information

Insured Crop Type: Please Select
Coverage Level (%): Please Select
Protection Factor (%): 100
Share (%): 100
Insurable Acres:
Sample Year: 2010

Graph

Type:
(•) Index Values ( ) Estimated Indemnities

Range:
Start 1989 End 2010

Intervals:
[x] Jan-Mar [x] Feb-Apr [x] Mar-May
[x] Apr-Jun [x] May-Jul [x] Jun-Aug
[x] Jul-Sep [x] Aug-Oct [x] Sep-Nov
[x] Oct-Dec

Table | Graph

Click here for 2010CY Final Indices

Year	Jan-Mar	Feb-Apr	Mar-May	Apr-Jun	May-Jul	Jun-Aug	Jul-Sep	Aug-Oct	Sep-Nov	Oct-Dec
2010	101.4	108.6	115.8	107.6	105.4	N/A	N/A	N/A	N/A	N/A
2009	126.6	117.2	89.6	60.2	72.1	96.1	115.3	103.6	102.5	107.6
2008	110.0	97.9	85.1	81.4	79.4	83.7	78.8	66.6	65.6	93.2
2007	105.7	126.1	141.2	142.2	121.2	96.6	76.3	65.5	66.6	88.2
2006	129.6	104.7	71.2	40.6	55.4	98.5	157.1	205.6	210.2	170.4
2005	147.6	158.5	174.2	165.4	133.1	98.3	79.8	78.4	102.7	117.0
2004	124.0	146.9	161.7	161.7	136.1	115.5	103.3	93.5	105.2	120.8
2003	89.1	79.6	60.1	48.8	59.7	63.0	51.8	37.8	75.9	116.6
2002	60.4	36.7	10.0	1.2	16.6	27.5	35.0	44.7	77.1	93.2
2001	20.3	36.5	64.6	99.9	96.9	60.9	43.7	26.3	28.8	55.1
2000	166.2	158.6	159.2	145.0	110.0	86.9	70.9	69.7	57.6	43.9
1999	169.1	170.5	166.8	187.3	191.0	196.1	169.2	164.8	176.3	183.0
1998	148.3	161.4	185.6	193.3	171.7	156.9	152.6	168.2	172.9	174.3
1997	101.3	113.2	131.3	154.1	162.1	155.6	133.2	153.5	172.2	158.6
1996	96.4	79.1	62.5	34.4	69.1	116.8	148.1	138.0	110.7	102.0
1995	104.5	101.5	94.0	86.5	83.8	71.2	72.2	66.1	75.1	76.6
1994	103.3	108.5	127.2	138.2	135.4	97.8	79.9	N/A	N/A	N/A
1993	79.5	82.0	83.6	75.7	91.9	128.5	160.6	146.5	104.7	72.1
1992	46.6	59.3	55.7	100.5	101.2	105.6	75.1	59.2	46.2	37.7
1991	78.2	69.4	56.9	49.2	69.4	77.7	86.8	68.1	45.7	25.7
1990	70.2	53.2	61.6	74.3	77.3	89.4	107.7	132.8	99.8	86.0
1989	23.0	39.2	57.9	60.0	66.7	77.6	102.8	111.2	104.2	78.2

Decision Support Tool
Pasture, Rangeland, Forage

This tool is for illustration purposes only. Your actual information may differ
For additional information, please click here.

Rainfall | Vegetation

Please Select a Location: State: New Mexico County: Guadalupe Grid: 133944 Grid Locator Print

Protection Information

Insured Crop Type: Please Select
Coverage Level (%): Please Select
Protection Factor (%): 100
Share (%): 100
Insurable Acres:
Sample Year: 2010

Graph

Type:
Index Values / Estimated Indemnities
Range:
Start 1989 End Select
Intervals:
Jan-Mar, Feb-Apr, Mar-May, Apr-Jun, May-Jul, Aug-Oct, Jun-Aug, Jul-Sep, Sep-Nov, Oct-Dec

Table | Graph

Click here for 2010CY Final Indices

Index Interval	Insured Acres per Index Interval	Policy Protection per Unit	Premium Rate per $100	Total Premium ($/acre)	Premium Subsidy ($/acre)	Producer Premium ($/acre)	Actual Index Value	Indemnity ($/acre)
Jan-Mar	-	-	-	-	-	-	-	-
Feb-Apr	-	-	-	-	-	-	-	-
Mar-May	-	-	-	-	-	-	-	-
Apr-Jun	-	-	-	-	-	-	-	-
May-Jul	-	-	-	-	-	-	-	-
Jun-Aug	-	-	-	-	-	-	-	-
Jul-Sep	-	-	-	-	-	-	-	-
Aug-Oct	-	-	-	-	-	-	-	-
Sep-Nov	-	-	-	-	-	-	-	-
Oct-Dec	-	-	-	-	-	-	-	-
Per Acre	N/A	N/A	N/A	-	-	-	N/A	-
Policy Total	-	-	N/A	-	-	-	N/A	-

County Base Value per Acre	$-
Dollar Amount of Protection per Acre	$-
Total Insured Acres	-
Total Policy Protection	-
Subsidy Level	-

Calculate

Amy Roeder
Risk Management Specialist
816-926-3834
amy.roeder@rma.usda.gov

2011 Drought: Impacts on the Cattle Industry

Derrell S. Peel

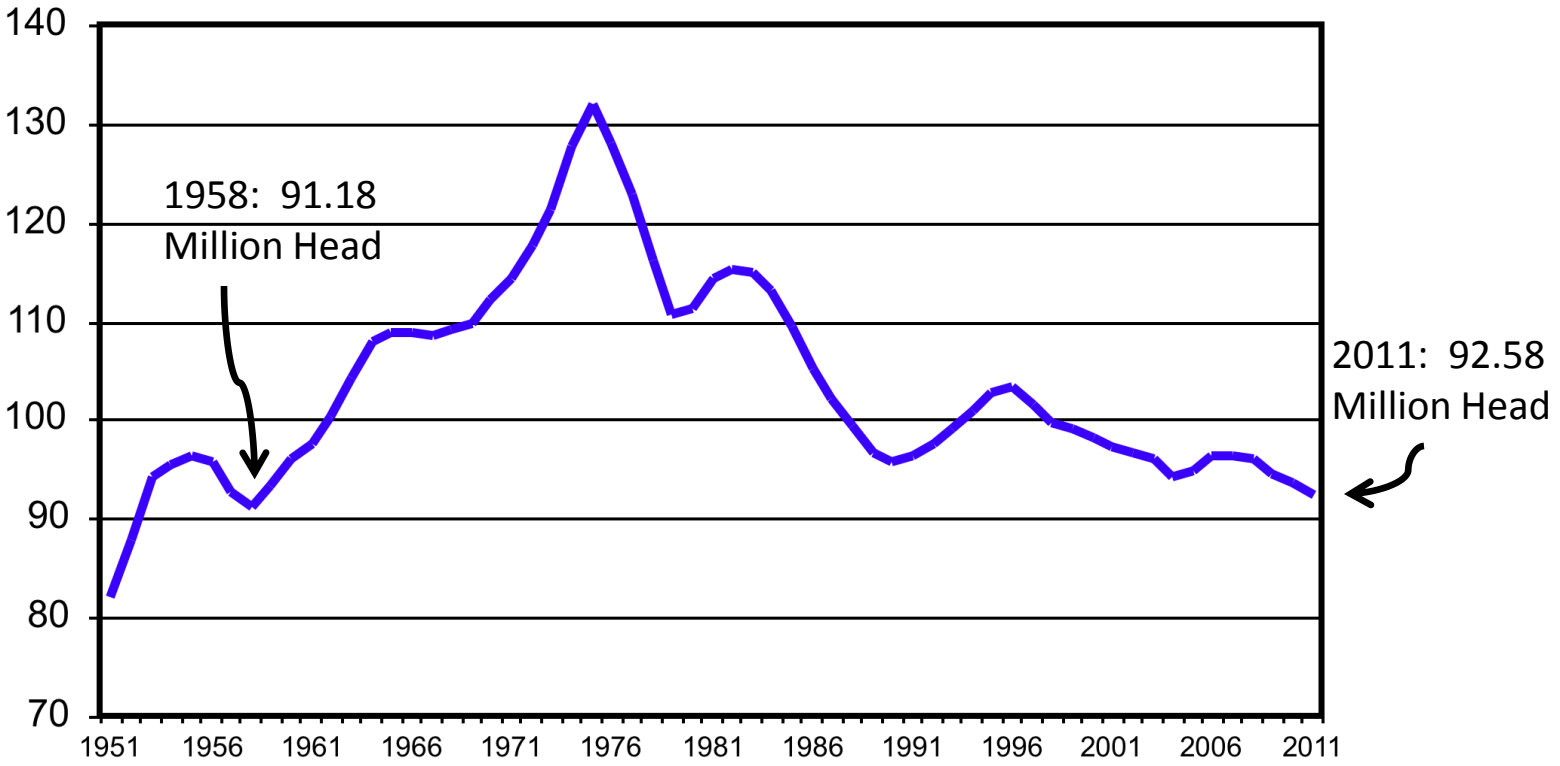
Breedlove Professor of Agribusiness and
Extension Livestock Marketing Specialist

Background: Beef Market Situation

- Record high cattle prices
- Cattle inventories at 50+ year lows
- Many other market factors
  - Decreased beef production
  - Domestic demand
  - Global beef demand
  - U.S. and global macroeconomic situations
  - Energy prices
  - …

JANUARY 1 TOTAL CATTLE INVENTORY

U.S., Annual

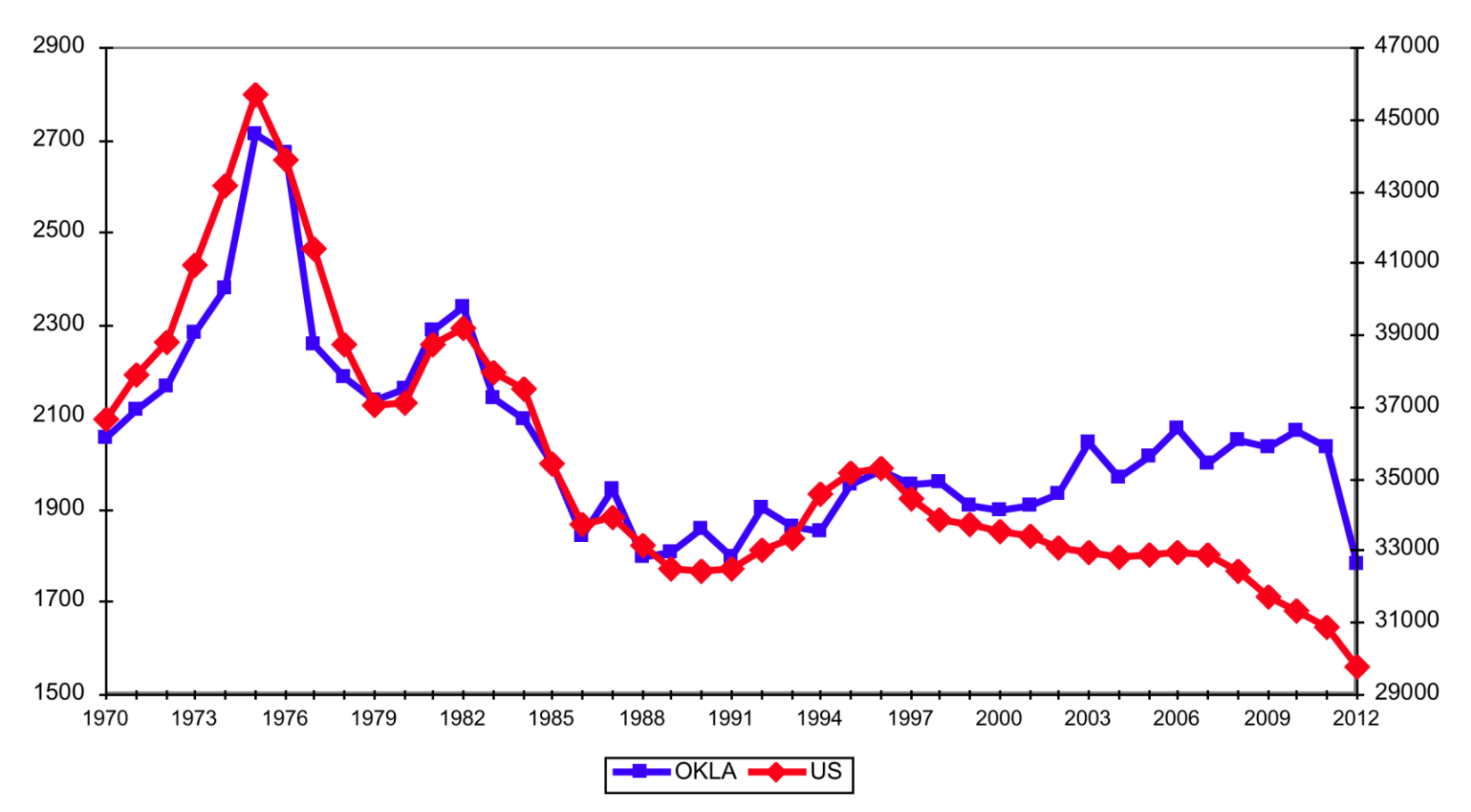


Livestock Marketing Information Center

Data Source: USDA-NASS

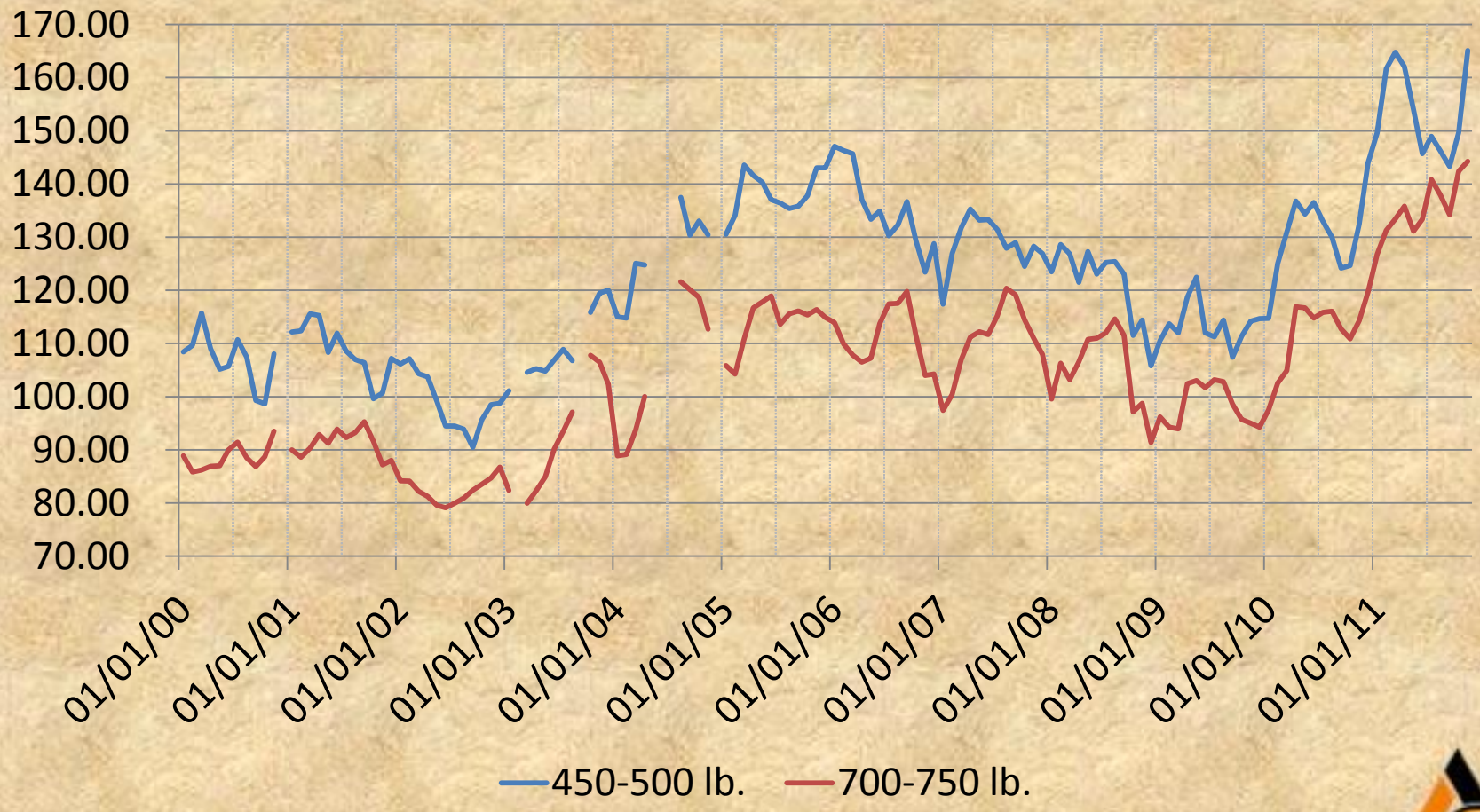
C-N-01
07/22/11

Oklahoma and U.S. Cattle Cycles:
Beef Cow Inventory, January 1



Feeder Steer Prices,

OKC, Monthly, Jan 2000-Nov 2011



Drought Impacts: So Far…

- Significant cattle liquidation
  - Lack of pasture/hay production
  - Lack of water
- Increased costs
  - Purchased feed
- Direct regional impacts have national market impacts
  - Pre-empted herd expansion nationally
- Cattle prices have remained strong
  - Minimized equity loss
  - Unique market situation

Drought Impacts: Managing Through the Winter

- Minimal feed supplies
  - Purchased feeds
    - Use of non-typical feeds
    - Variable quality and quantity
  - Water is limiting for some!
- Challenge to maintain cow body condition
  - Reduced productivity in 2012 and 2013

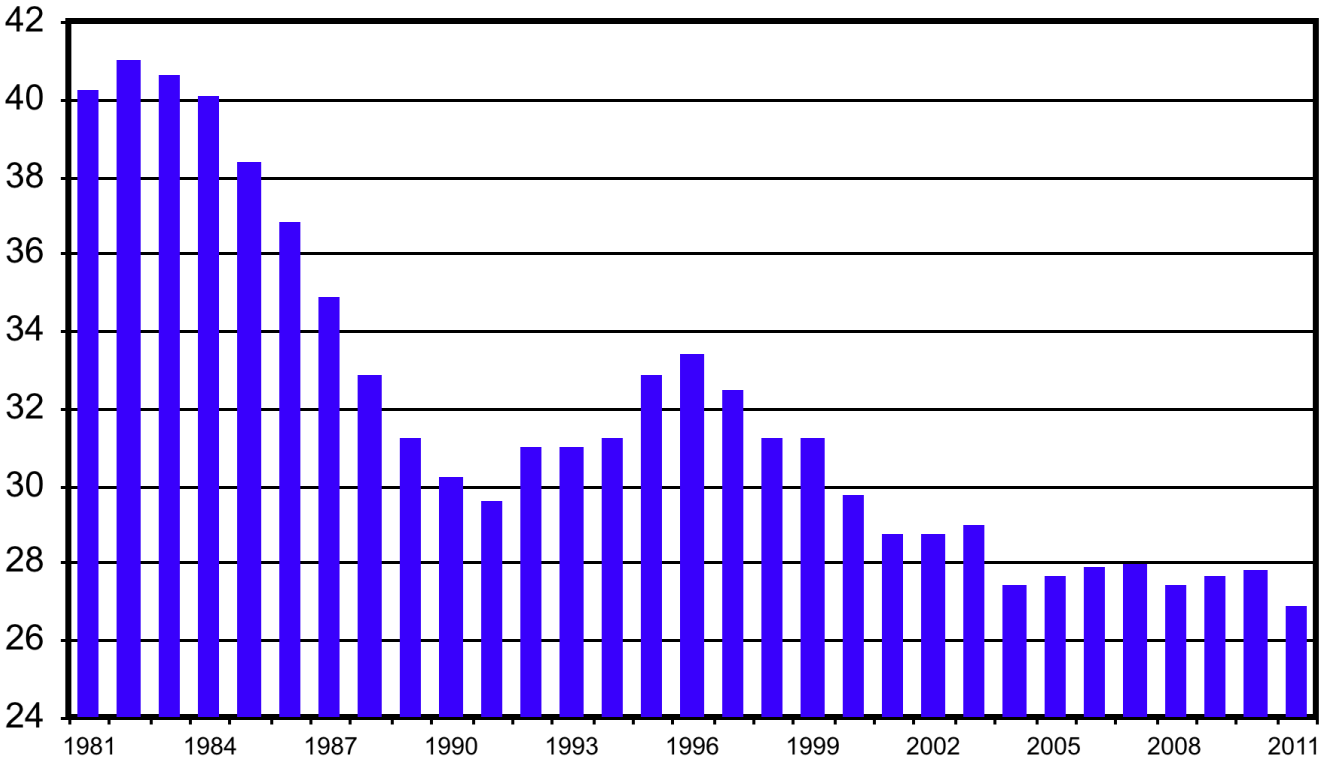
Continued Drought: Additional Impacts

- Depends on timing of 2012 drought
  - Dry spring (like 2011)
    - Immediate and severe impacts
      - Culling earlier than in 2011
      - Financial hardships for producers
  - Late summer drought
    - Delayed or potentially less liquidation and financial impact
    - Producers more financially vulnerable
- Financial impacts will last several years

JANUARY 1 FEEDER CATTLE SUPPLIES

Mil. Head

Residual, Outside Feedlots, U.S.



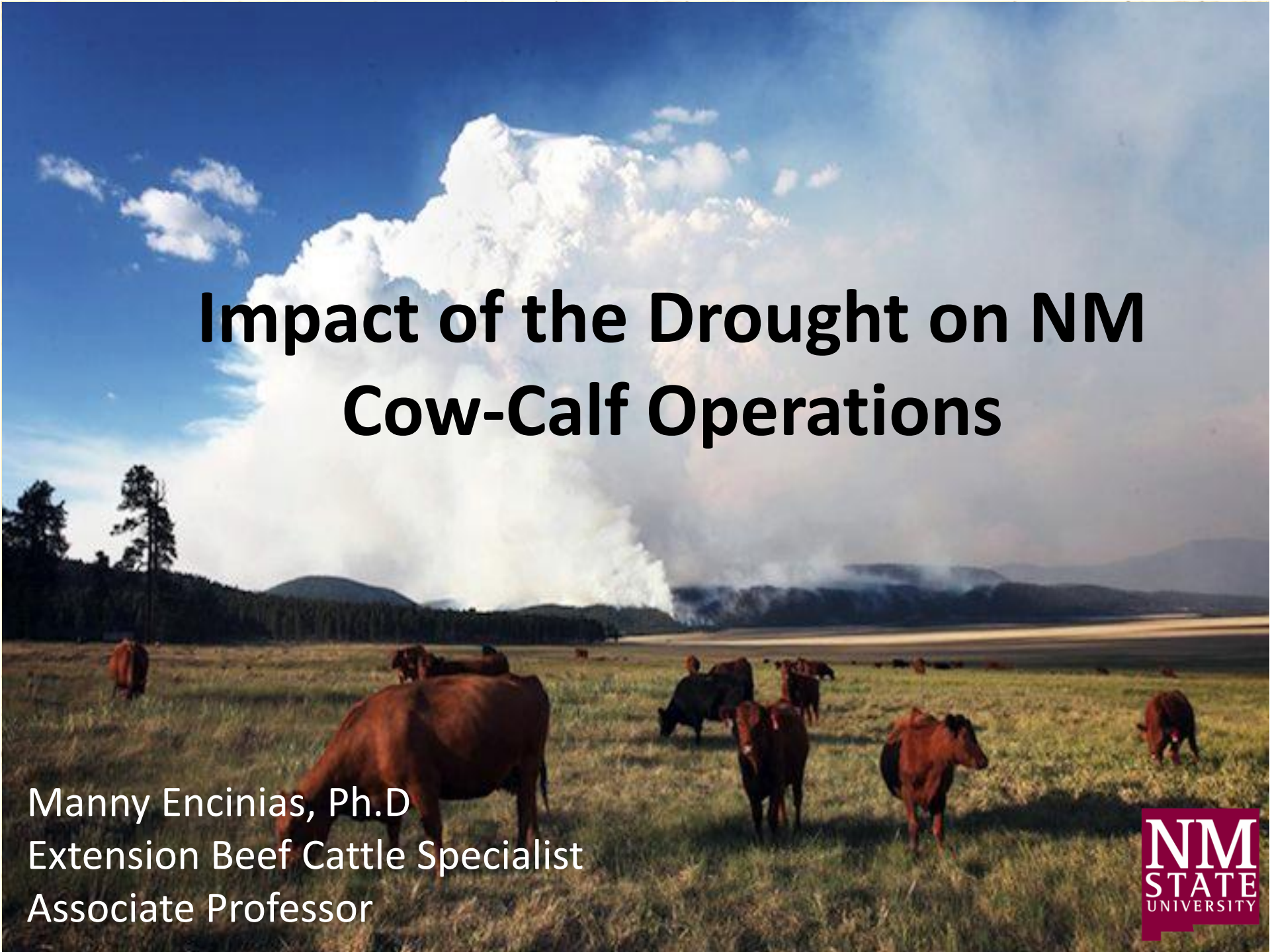
C-N-30
07/22/11

Livestock Marketing Information Center

Data Source: USDA-NASS

After the Drought: Rebuilding Challenges

- Limited cattle numbers will slow recovery
  - High prices for breeding animals
  - Reduced availability
- Cow-calf producers need to consider a slow rebuilding strategy
  - More financially feasible
  - Facilitate pasture recovery
  - Combine with stocker enterprises
- Consider long-run production strategy
  - Change production mix permanently?

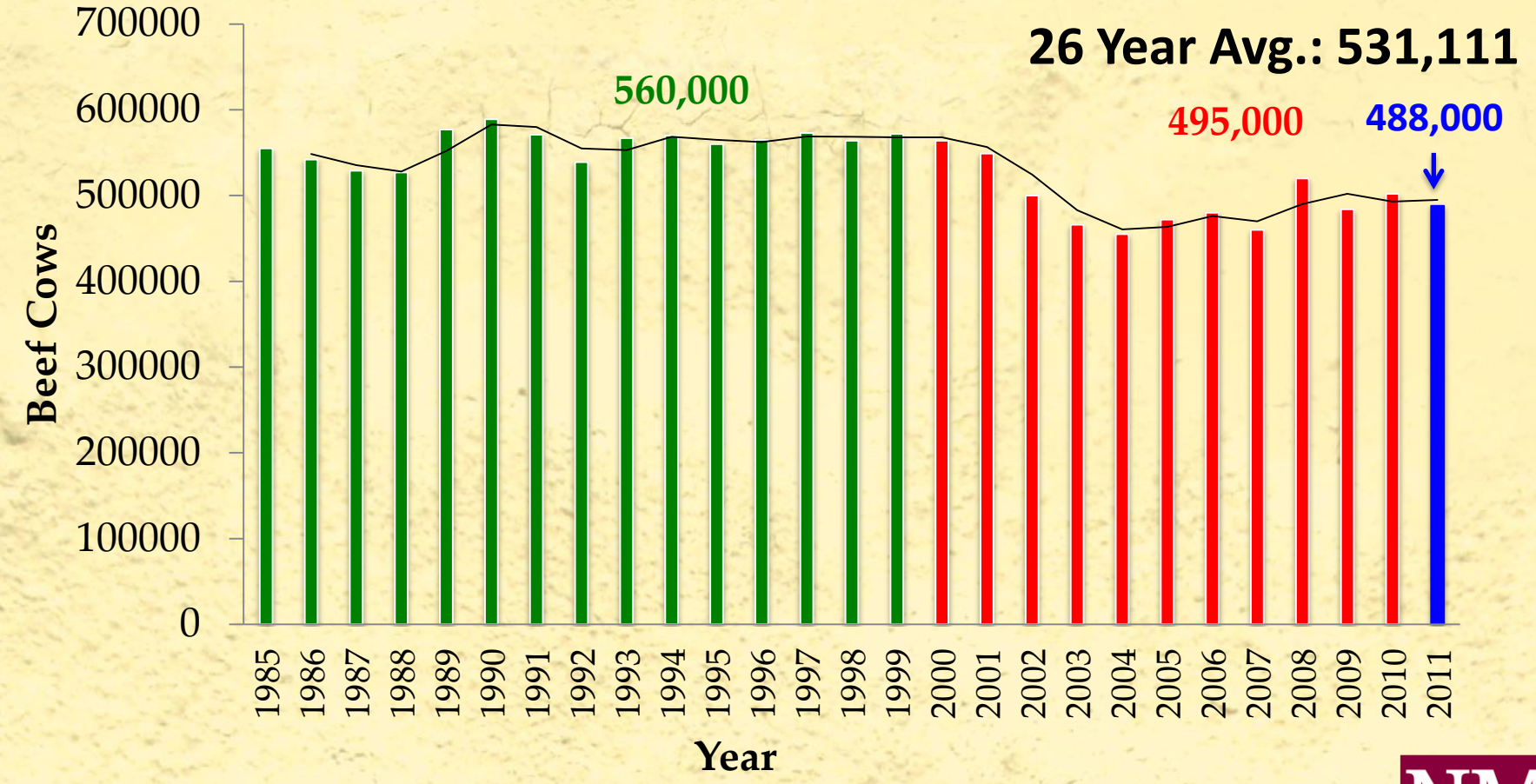


Impact of the Drought on NM Cow-Calf Operations

Manny Encinias, Ph.D
Extension Beef Cattle Specialist
Associate Professor

NM STATE UNIVERSITY

NM Beef Cow Inventory (1985-2011)



Source: www.nass.usda.gov

NM STATE UNIVERSITY

NM Beef Cow Exports State Totals[a,b]

Year	Pasture	Sold	Harvested	Total	Cows to be Replaced[c]
2010	11,885	5,434	20,656	37,975	26,090
2011	24,226	10,633	27,195	62,054	**37,828**
Total	36,111	16,067	47,851	100,029	63,918

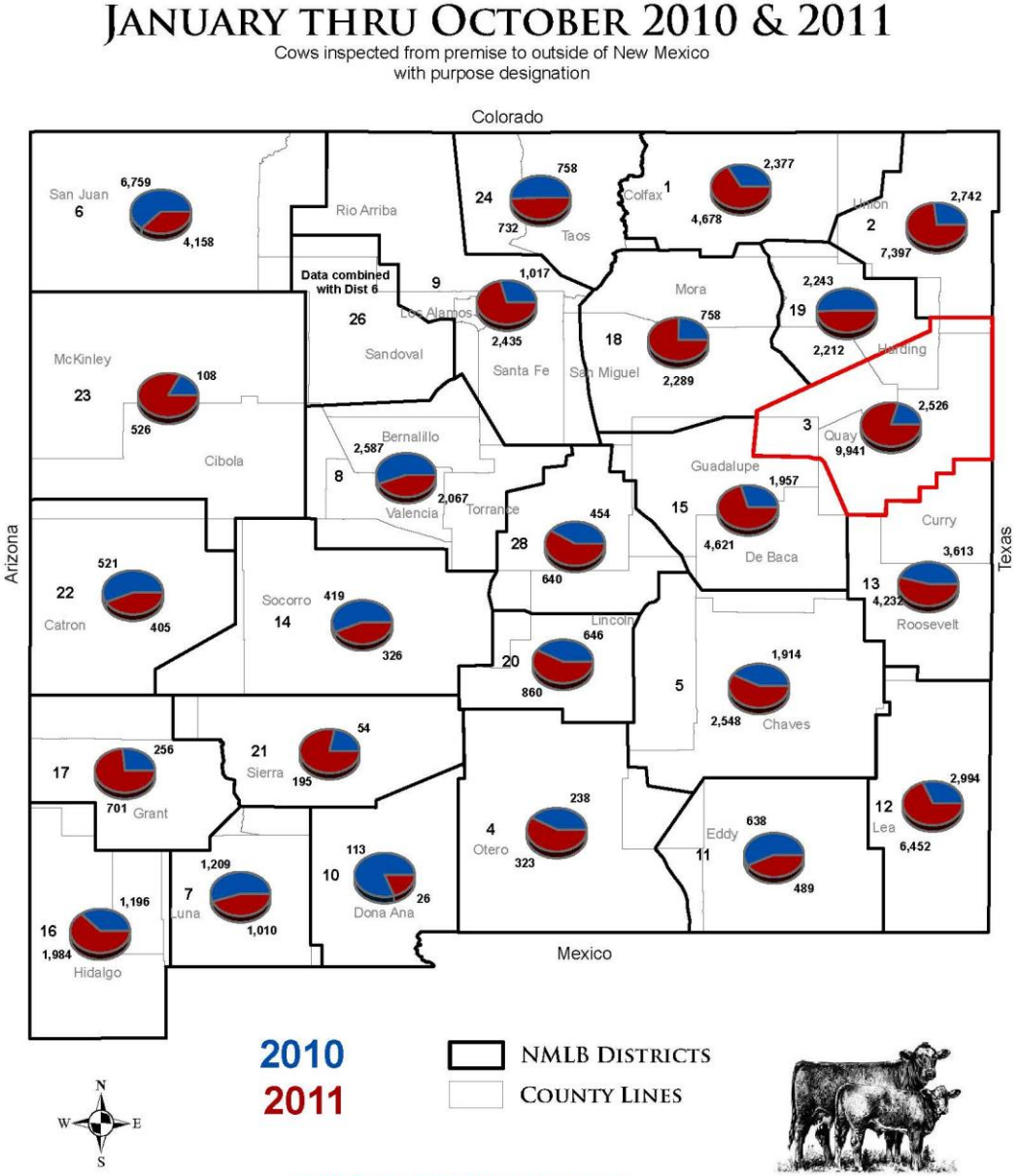
[a]NMLB Export Data Jan. 1 to Oct. 31 – 2010 and 2011

[b]Beef cows exported from NM Ranches; does not include sale barn exports

[c]Estimated cows to be replaced; equal to beef cows sold out of state and harvested

Source: 2011 NMLB

NM STATE UNIVERSITY

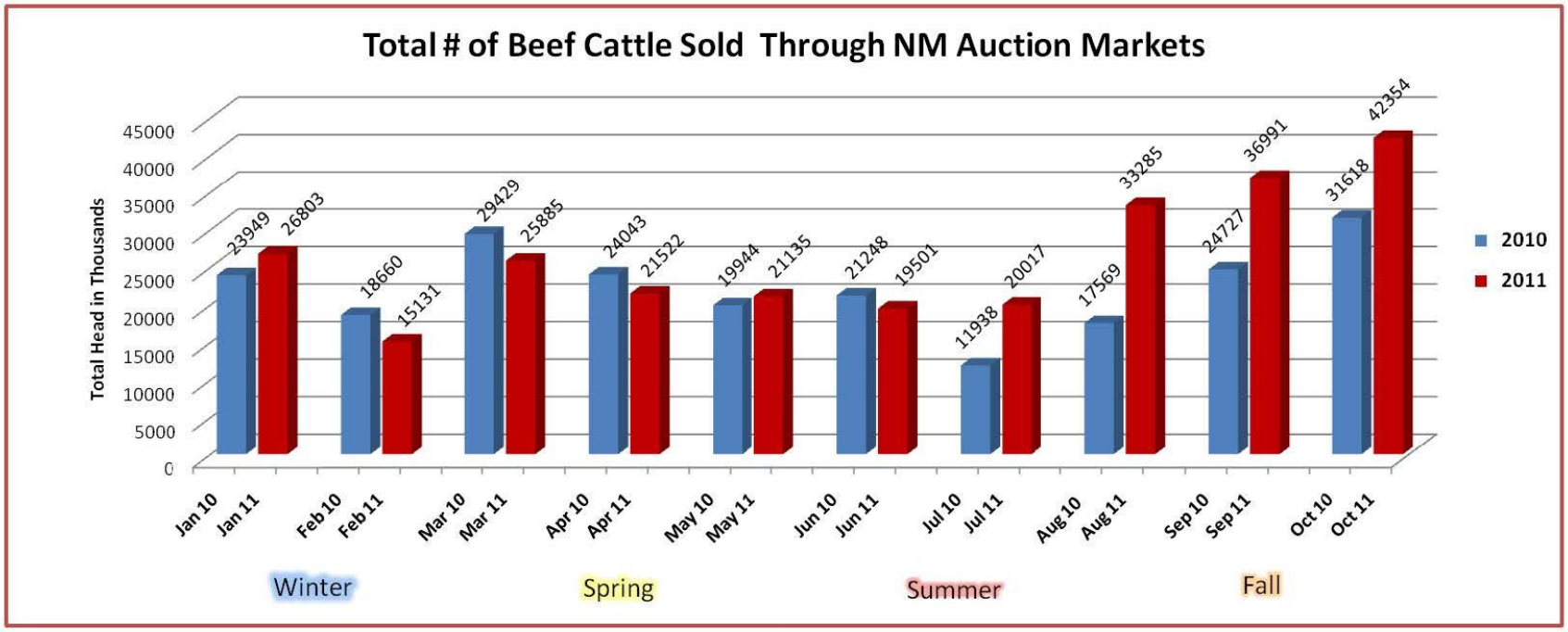


District 3 is noted as having the highest head count increase in exports at 7,415

Beef Cow Exports
- 42,138 (67.9%)
- 9 Eastern-most Brand Districts

Source: 2011 NMLB

NM STATE UNIVERSITY

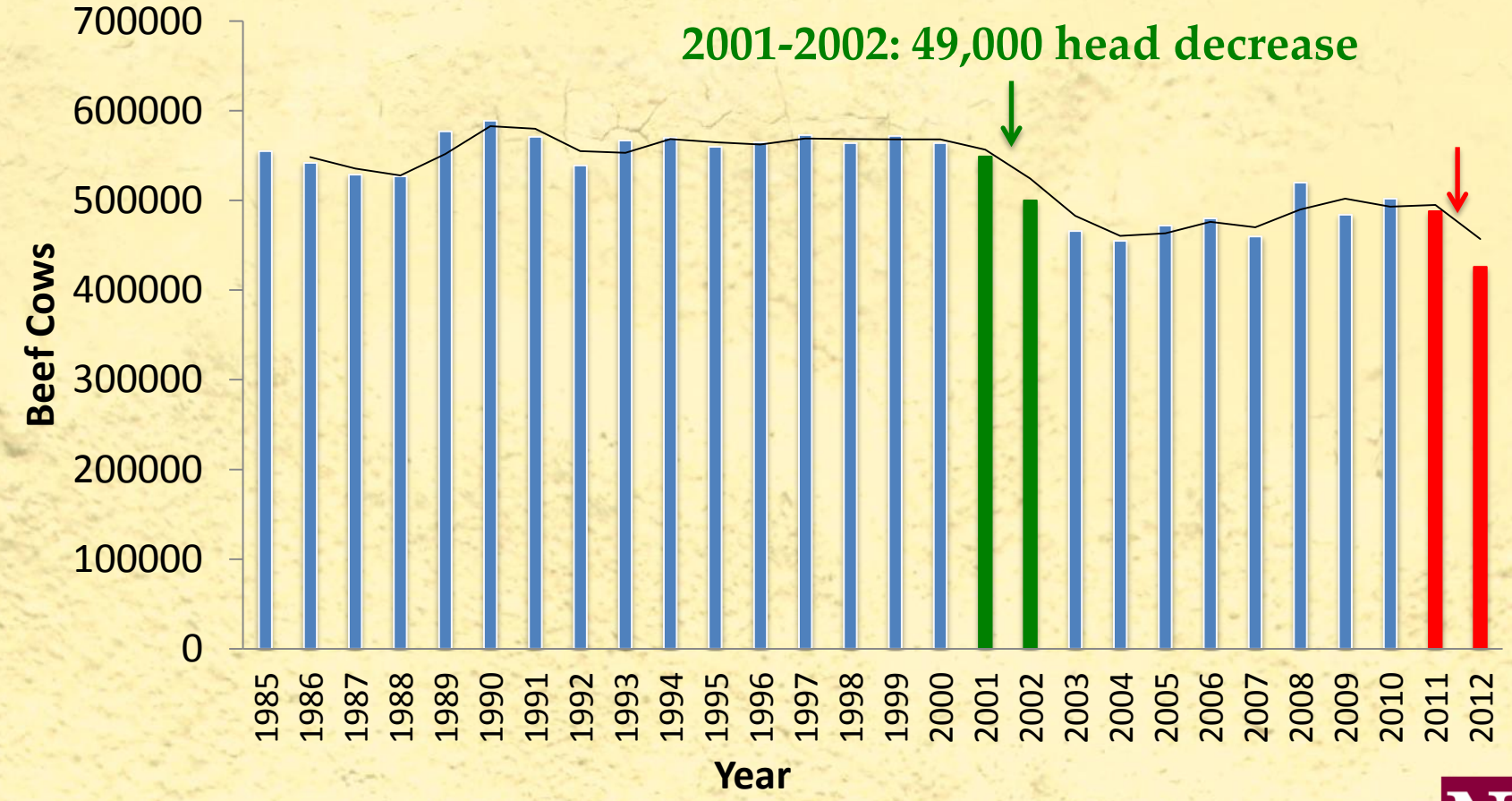


Year	NM Auction Market Sales
2010	223,125
2011	262,624
	+ 39,499

Fall Run (August to October)
+ 46,795 head

Source: 2011 NMLB

NM Beef Cow Inventory (1985-2011)



*Thru Oct. 31st, 62,054 head is the single largest decline in last 26 years

www.nass.usda.gov

NM STATE UNIVERSITY

Winter Management Challenges for NM Cow-Calf Operations

- **Pasture Shortage**
  - Late season rains did not translate into good grass production or adequate runoff to replenish dirt tank (reservoir) storage
  - Seasonal winter grazing options (i.e. cornstalks) greatly reduced because of hay shortage
- **Cowherd Exports to Pasture Outside Drought Region**
  - Great option to retain the cowherd
  - At what cost?
    - Pasture, Hay, and Care
    - Cow Production
    - Calf Survival

NM STATE UNIVERSITY

Winter Management Challenges for NM Cow-Calf Operations

- **On the Ranch – Understanding the Situation**
  - Adequately meeting a cow's nutrient requirements
    - What is the first limiting nutrient?
  - Winter supplementation strategies on native pastures in NM
    - Normal production year – protein deficient
    - ***Drought year – energy deficient***
    - Supplement options
      - Traditional – complete commercial
      - Non-traditional - commodity (co-product feeds)

NM STATE UNIVERSITY

Winter Management Challenges for NM Cow-Calf Operations

- **On the Ranch – Understanding the Situation**
  - Purchasing harvested forages
    - There is no locally available hay available, today
    - Price (Expected/Unexpected)
    - Quality
      - Regional differences
    - Non-traditional sources (buyer beware)
      - Separating the good from the bad
      - If price sounds to good to be true…..
    - Impact on cattle production
    - Introduction of new weeds (hay feeding strategies)
  - Water – quantity/quality

NM STATE UNIVERSITY

Major Decisions for NM Cow-Calf Managers to Start Thinking About

- **Cost of production**
  - How long can I afford to stay in?
- **Exploring Options on Pasture Outside of NM**
- **Marketing Strategies**
  - Replacement heifers
  - Heart of the cowherd
  - How will similar type and kind of cows be replaced?
    - Short supply (at best)
    - Cost

NM STATE UNIVERSITY

Dr. Manny Encinias, Ph.D

Extension Beef Cattle Specialist

Associate Professor

New Mexico State University

Clayton Livestock Research Center

15 NMSU Lane

Clayton, NM 88415

Email: mencinia@nmsu.edu

Mobile: (505) 927-7935

Office: (575) 374-2566

Fax: (575) 374-2568

Managing Drought in the Southern Plains

Cattle Impacts

Eldon White
Texas & Southwestern
Cattle Raisers Association
NOAA Webinar -- December 8, 2011

TSCRA Background

- The Texas and Southwestern Cattle Raisers Association is a 134 year old trade association.
- Largest and oldest livestock association in Texas & southwest.
- 15,500 members
- 4 million hd of cattle
- 79.5 million acres in TX & OK

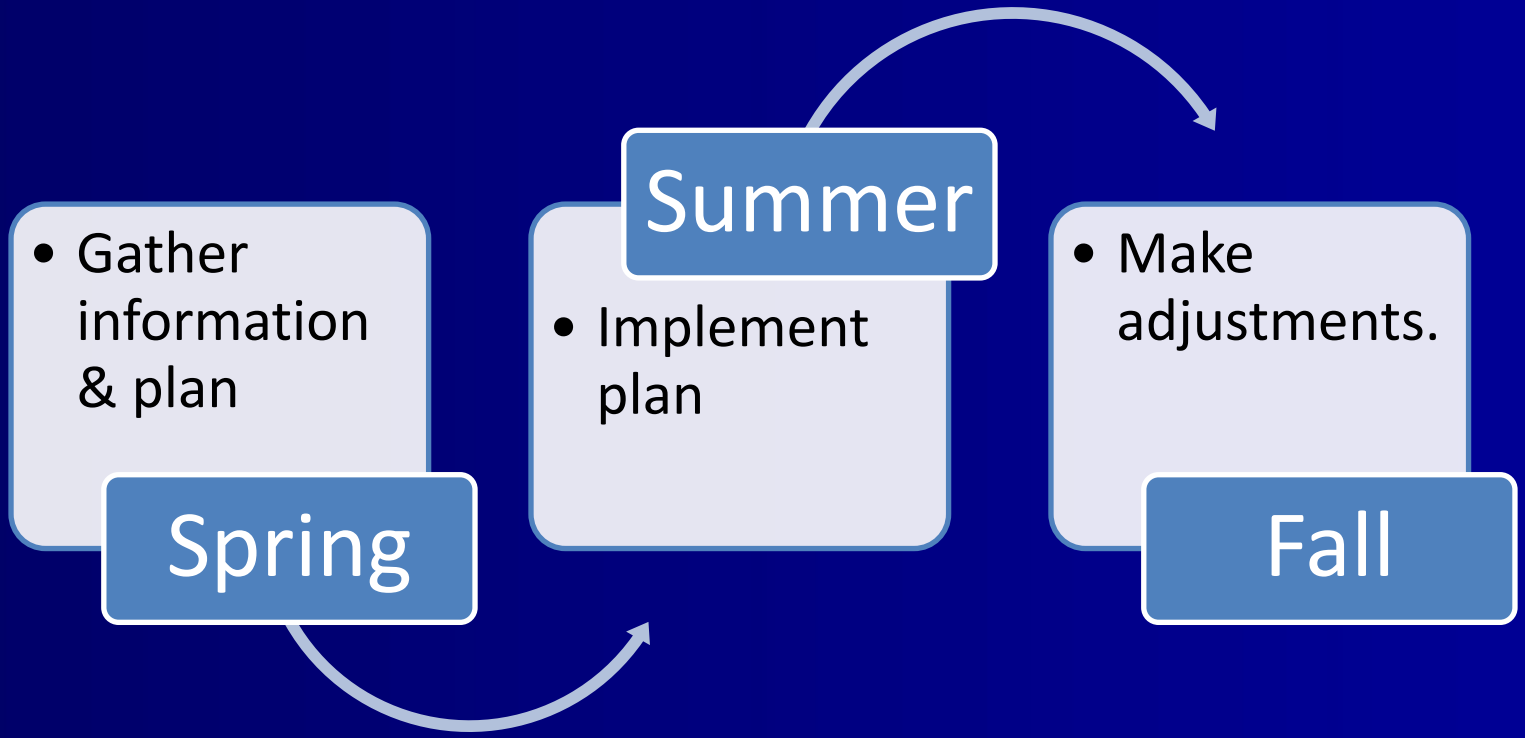
Drought Impact

- Survey of members (September)
  - 84% have reduced herd
  - Average reduction is 38%
- Cattle sold, moved out of state or harvested.
- 600,000 – 800,000 hd reduction (12-16%)

Drought Impact

- On agriculture … $5.2 billion
- On livestock …… $2.2 billion

Decision Map



Decision Map

- Spring (April – May)
  - Used climate information to estimate prospects for spring rain.
  - Began formulating plan for stocking rates, pasture rotation and hay needs.

Decision Map

- Summer (June - August)
  - Implemented plan
    - Weaned calves at a lighter weight
      - Saved feed calf would have eaten
      - Reduced nutrition needs of cows
    - Extended available pasture
      - Fed hay or "range cubes"
      - More frequent pasture rotation
      - Use of "reserve" pasture
      - Leased pasture (out of state)

Decision Map

- Summer (June - August)
  - Implemented plan
    - Reduced herd size
      - Sold off older and less productive cows
      - Sold off lower genetic quality cattle
      - Sold off “ornery” cows!

Decision Map

- Fall (September – November)
  - Plan Adjustment
    - Water supplies become critical
    - Cost of feeding increases dramatically
    - Distance to available pasture increases
      - Pasture lease cost increases
      - Transportation cost increases

Decision Map

- Fall (September – November)
  - Mid-September …critical decision point
    - Fall wheat grass pasture availability (rain prospects…warm weather??)
    - Availability & cost of hay for winter

Decision Map

"Should I continue to spend more money buying feed … or should I sell more, or all, of my cows?"

Decision Map

- As of December 8, 2011
  - Some, but limited, wheat grass pasture
  - Climatologists – La Nina returns
  - 2012 Spring rains uncertain

Decision Map

Liquidation of the cattle herd continues.

Lessons Learned

- Manage grass, hay and money resources on a 10 year drought plan
- Cannot feed yourself out of a drought
- Single year drought will be felt for 2-3 years – plan accordingly
- Cattle herd – high quality, gentle

Lessons Learned

- Cattle raisers are survivors….

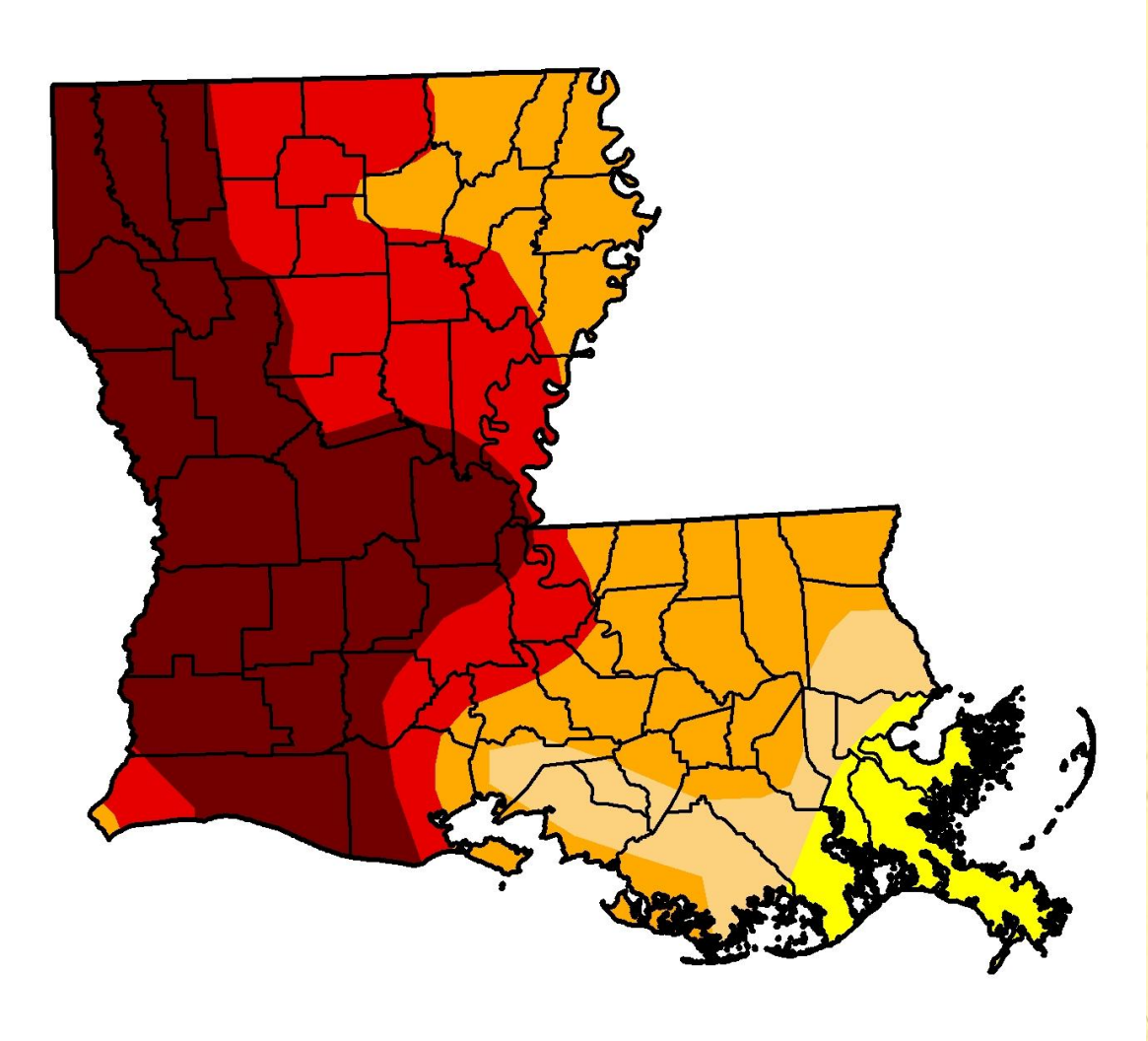
Thank You

A Quick Summary of Drought in Louisiana Since Late August

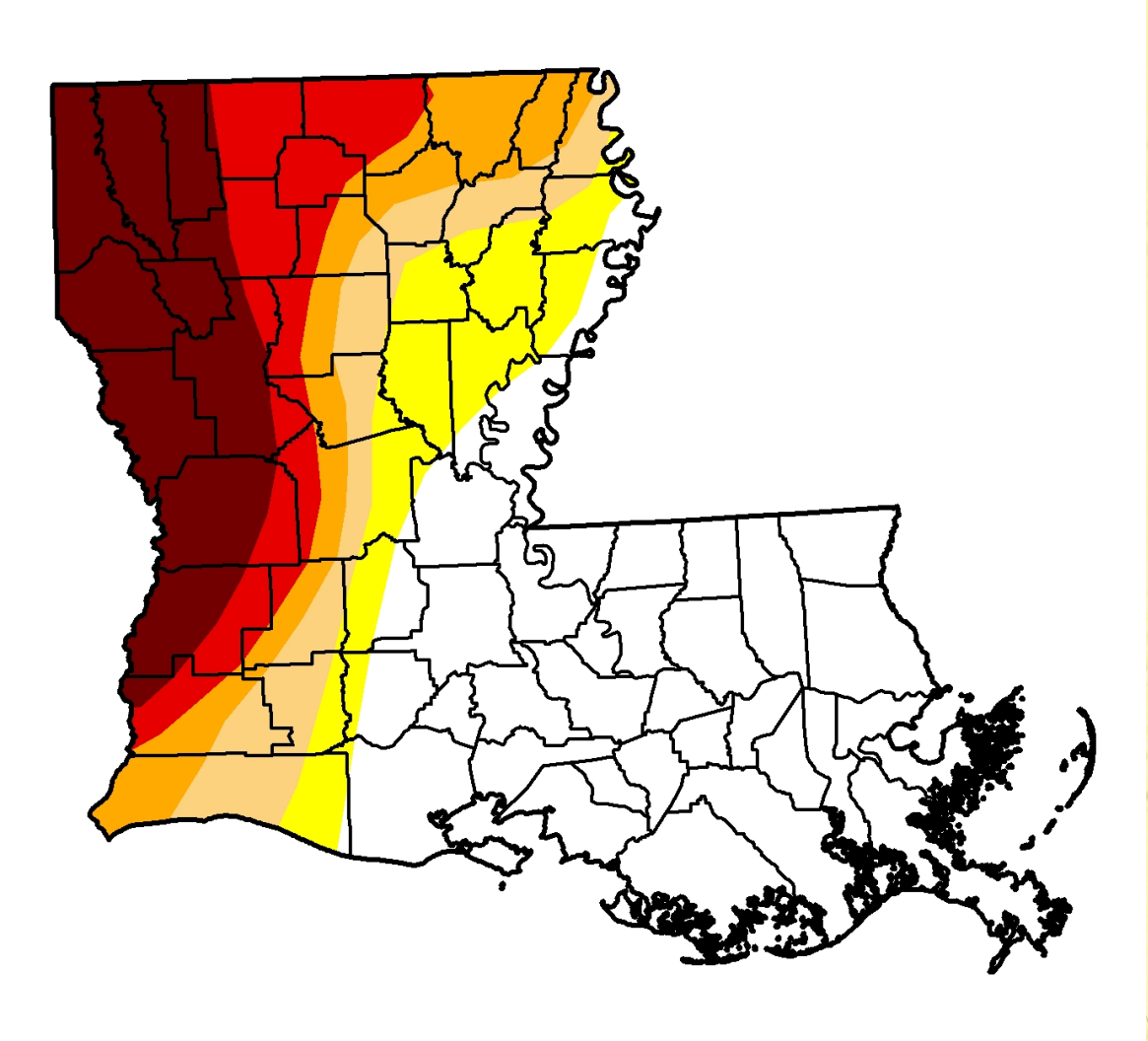
Barry Keim

Louisiana State Climatologist

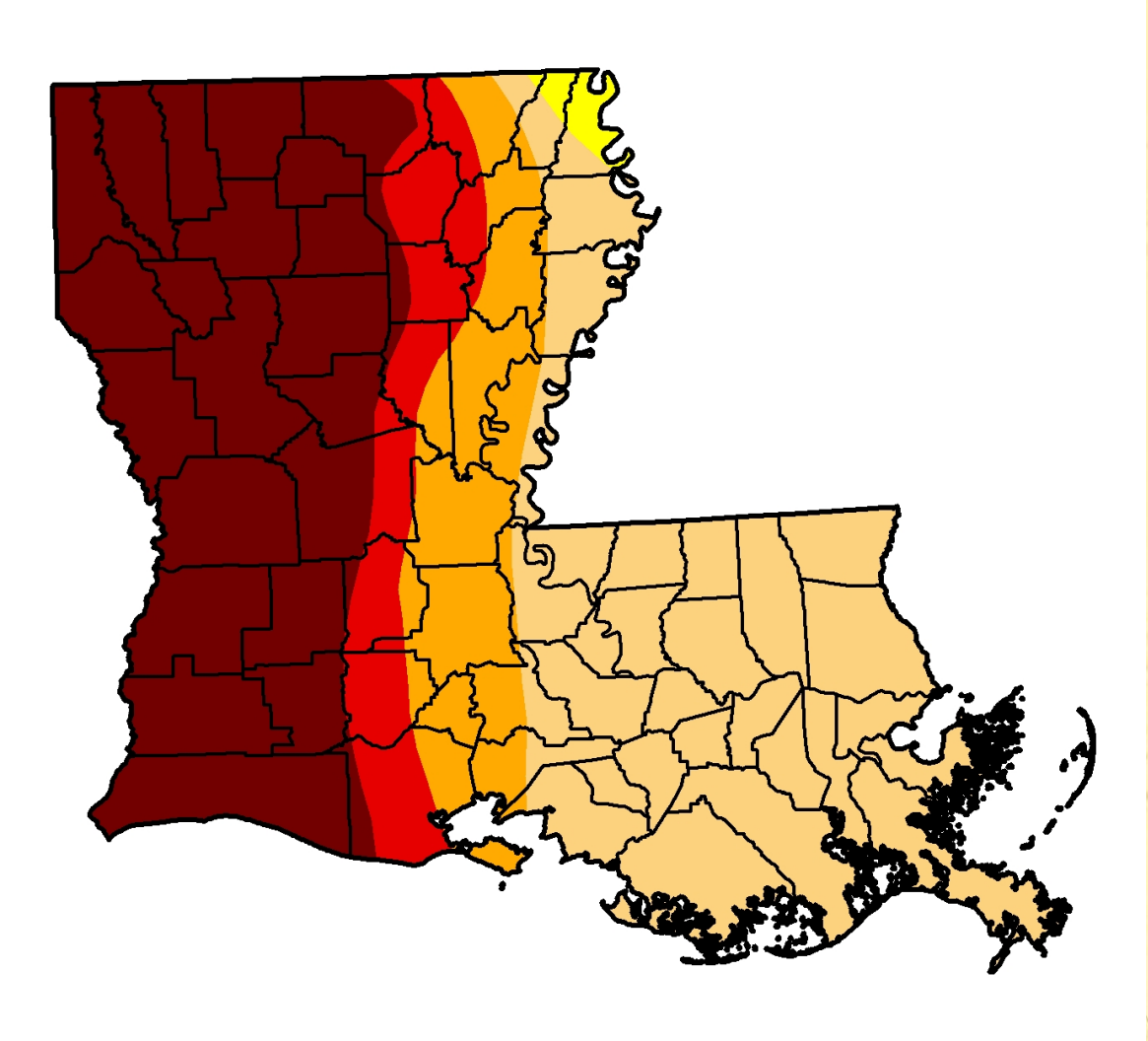
DM on August 30, 2011



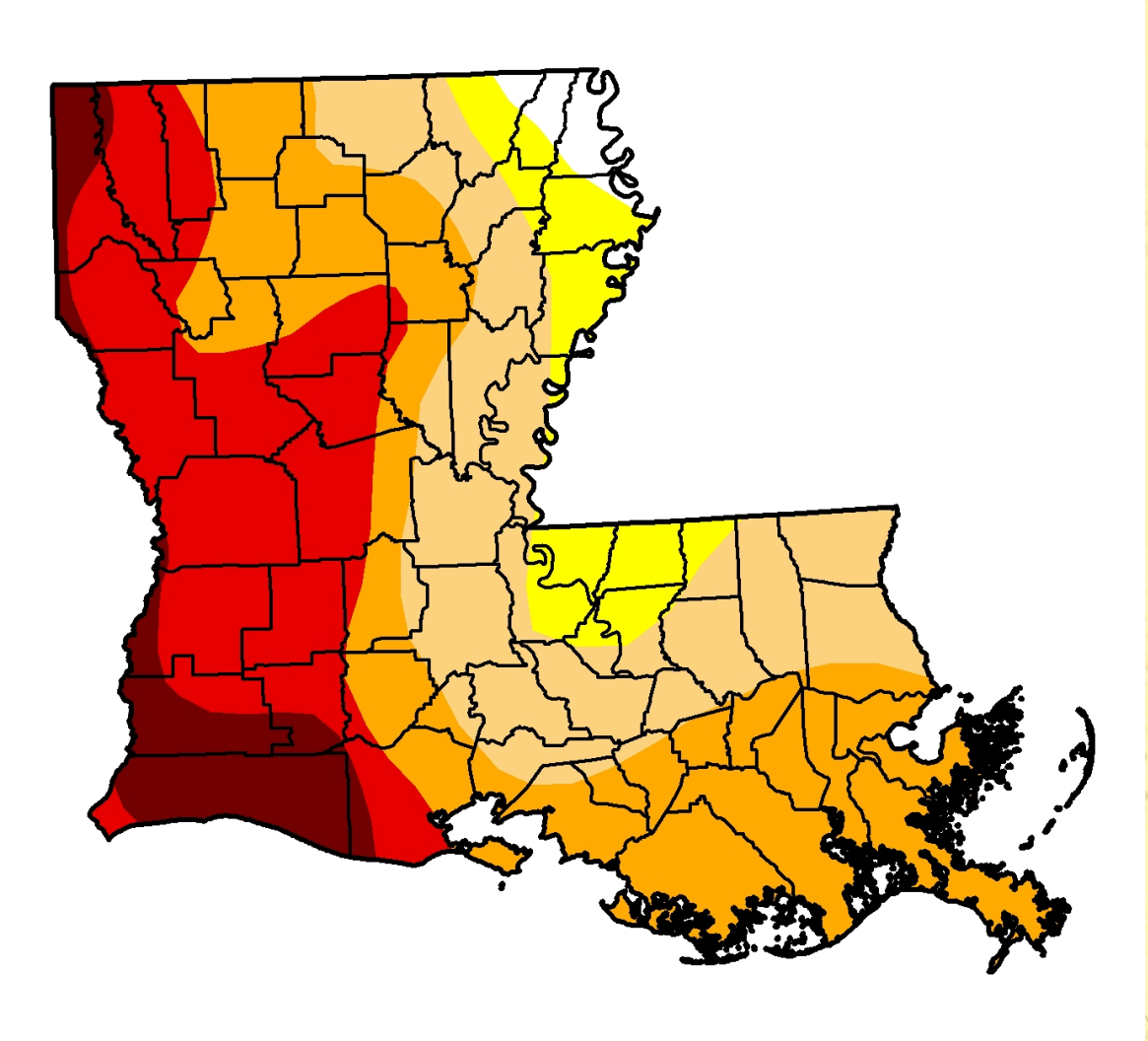
DM on September 6, 2011



DM on November 22, 2011



DM on December 6, 2011



Resources

- U.S. Drought Portal
  - http://www.drought.gov
- Past webinars, summaries, and Federal/State Assistance
  - http://www.drought.gov/portal/server.pt/community/southern_plains
- Drought Impact Reporter
  - http://droughtreporter.unl.edu/
- State Climatologists
  - http://www.stateclimate.org/
- National Drought Mitigation Center
  - http://drought.unl.edu/
- Southern Climate Impacts Planning Program (SCIPP)
  - http://www.southernclimate.org/
  - Youtube: http://www.youtube.com/user/SCIPP01
- Climate Assessment for the Southwest (CLIMAS)
  - http://www.climas.arizona.edu/

We are now on facebook!
Southern Climate Impacts Planning Program

Is drought properly classified in your region? If not, let us know!

- Drought Impact Reporter
- Contact your State Climatologist
- E-mail the DM Authors: droughtmonitor@unl.edu